

CONSOLIDATED DEVELOPMENT CHARGES BACKGROUND STUDY
PREPARED BY HEMSON FOR THE COUNTY OF PETERBOROUGH

DEVELOPMENT CHARGES BACKGROUND STUDY

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1000 - 30 St. Patrick Street, Toronto ON M5T 3A3
416 593 5090 | hemson@hemson.com | www.hemson.com

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EXECUTIVE SUMMARY

The *Development Charges Act, 1997 (DCA)* and its associated *Ontario Regulation 82/98 (O. Reg. 82/98)* allow municipalities to impose development charges on development and redevelopment to pay for development-related capital costs. This 2022 County of Peterborough Development Charges Background Study is presented as part of a process to establish a development charges by-law that complies with this legislation.

A. PURPOSE OF THE 2022 DEVELOPMENT CHARGES (DC) BACKGROUND STUDY

i. Legislative Context

The County of Peterborough 2022 Development Charges Background Study is presented as part of the process to lead to the approval of a new DC by-law in compliance with the *DCA*. The study is prepared in accordance with the *DCA* and associated regulations, including amendments that came into force through the *More Homes, More Choice Act* and *COVID-19 Economic Recovery Act*.

ii. Key Steps in Determining Future Development-Related Projects

In accordance with the *DCA* and associated regulations, several key steps are required to calculate development charges. This includes preparing a development forecast, establishing historical service levels, determining the increase in need for services arising from development and appropriate shares of costs, and attribution to development types (i.e. residential and non-residential).

iii. DC Eligible and Ineligible Costs

Development charges are intended to pay for the initial round of capital costs needed to service development over an identified planning period. This is based on the overarching principle that “growth pays for growth”. However, the *DCA* and associated regulation includes several statutory adjustments and deductions that prevent these costs from fully being recovered by growth. Such adjustments include, but are not limited to: ineligible costs (e.g. computer equipment and vehicles with a replacement life of less than seven years); ineligible services, including parking facilities, parkland acquisition, etc.; deductions for costs that exceed historical service level caps; and statutory exemptions for specific uses (e.g. industrial expansions).

iv. The Development-Related Capital Program is Subject to Change

It is recommended that Council adopt the development-related capital program developed for the purposes of the 2022 DC Background Study. However, it is recognized that the DC Background Study is a point-in-time analysis and there may be changes to project timing, scope and costs through the County's normal annual budget process.

B. DEVELOPMENT FORECAST

The tables below summarize the anticipated residential and non-residential development over the 2022 to 2031 and 2022 to 2051 planning periods. Details on the development forecast are provided in Appendix A.

Residential Growth Forecast	2021 Estimate	General Services 2022 - 2031		Services Related to a Highway 2022 - 2051	
		Growth	Total at 2031	Growth	Total at 2051
Total Dwellings (incl. Seasonal)	33,990	3,020	37,010	9,610	43,600
<i>Occupied</i>	25,090	3,020	28,110	9,610	34,700
<i>Seasonal</i>	8,900	-	8,900	-	8,900
<i>Census Population ¹</i>	62,445	7,503	69,948	17,753	80,198
Population Growth In New Dwelling Units		7,651		24,152	

Note 1: Census Population excludes census undercoverage which is estimated at 2.20%. The census population in 2051 is equal to 82,000 total population and consistent with the planning targets approved

Non-Residential Growth Forecast	2021 Estimate	General Services 2022 - 2031		Services Related to a Highway 2022 - 2051	
		Growth	Total at 2031	Growth	Total at 2051
Place of Work Employment	13,139	3,139	16,278	8,582	21,722
<i>Population Related</i>	3,638	479	4,117	1,468	5,106
<i>Employment Land</i>	2,882	2,499	5,382	6,780	9,662
<i>Rural</i>	6,619	160	6,780	334	6,953
Non-Residential Building Space (m ²)		301,289		826,578	

Excludes work at home employment

C. CALCULATED DEVELOPMENT CHARGES

The table below provides the County-wide development charges for residential and non-residential development based on the aforementioned forecast.

Service	Residential Charge by Unit Type ¹			Non-Residential Adjusted Charge per Square Metre
	Singles/Semis	Rows	Apartments	
TOTAL COUNTY-WIDE CHARGE PER UNIT	\$10,957	\$9,299	\$6,752	\$39.61
¹ Based on a Persons Per Unit of:				
	2.71	2.30	1.67	

D. LONG-TERM CAPITAL & OPERATING COSTS

An overview of the long-term capital and operating costs for the capital facilities and infrastructure to be included in the DC by-law is provided in the study. This examination is required by the *DCA*. Additional details on the long-term capital and operating impact analysis are found in Appendix E. By 2031, the County's annual net operating costs arising from the development-related infrastructure are estimated at about \$2.7 million.

For the general services, about \$11.7 million of development-related project costs will need to be funded from non-development charges sources over the next ten years. About \$19.2 million of development-related project costs will need to be funded from non-development charges sourced over the next 30 years for the Services Related to a Highway. Interim financing of \$1.4 million to 2031 may be required for projects that include other development-related funding sources (including post-period benefit to be considered in future by-laws).

E. ASSET MANAGEMENT PLAN

The main purpose of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the DC by-law are financially sustainable over their full life cycle. The DC recoverable annual asset management contributions for the 2022 to 2031 planning period have been calculated. The year 2032 has been included to calculate the annual contribution for the 2022 to 2031 period as the expenditures in 2031 will not trigger asset management contributions until 2032. Similarly, the year 2052 has been included to calculate the annual contribution for the 2022 to 2051 period.

The County will need to fund an additional \$49,100 per annum by 2032 and \$1.2 million per annum by 2052 to properly fund the full life cycle costs of all assets supported under the by-law.

F. COUNTY'S DEVELOPMENT CHARGES BY-LAW RELEASED UNDER SEPARATE COVER

The County's proposed DC by-law was made available under separate cover and available on the County's website.

1. INTRODUCTION

The *Development Charges Act, 1997 (DCA)* and its associated *Ontario Regulation 82/98 (O. Reg. 82/98)* allow municipalities in Ontario to recover growth-related capital costs from new development. The County of Peterborough Development Charges Background Study is presented as part of a process to pass a new development charge by-law in compliance with this legislation.

Development forecasts for the County of Peterborough between 2022 and 2051 will increase the demand for all County services. The County wishes to continue implementing DCs to fund capital projects related to development so that growth can continue to be serviced in a fiscally responsible manner.

When passing a DC by-law, the *DCA* and *O. Reg. 82/98* require that a development charges background study be prepared in which DCs are determined with reference to:

- A forecast of the amount, type and location of development anticipated in the County;
- The average level of service provided by the County over the ten-year period immediately preceding the preparation of the background study;
- A review of capital works in progress and anticipated future capital projects, including an analysis of gross expenditures, funding sources, and net expenditures incurred or to be incurred by the County or its local boards to provide for the expected development, including the determination of the development and non-development-related components of the capital projects;
- An examination of the long-term capital and operating costs for the capital infrastructure required for each service to which the development charges by-laws would relate; and
- An Asset Management Plan to deal with all assets whose capital costs are proposed to be funded under the DC By-law, demonstrating that all assets included in the capital program are financially sustainable over their full life cycle.

The background study establishes the net capital costs attributable to development that is forecast to occur in the County of Peterborough between 2022 and 2051. These development-related net capital costs are apportioned to residential and non-residential development in a manner that reflects the increase in the need for each service.

The *DCA* provides for a period of public review and comment regarding the proposed development charges. This process includes considering and responding to comments received by members of the public about the calculated charges and methodology used. Following completion of this process, and in accordance with the *DCA* and Council's review of the study, it is intended that Council will pass new development charges for the County.

The remainder of this study sets out the information and analysis upon which the proposed development charges are based.

Section II designates the services for which the DCs are calculated and the areas within the County to which the DCs will apply. It also briefly reviews the methodologies that have been used in this background study.

Section III presents a summary of the forecast residential and non-residential development which is expected to occur within the County over a planning period from 2021 to 2051.

Section IV summarizes the ten-year historical average capital service levels that have been attained in the County, which form the basis for the development charges calculations.

In **Section V**, the development-related capital program that has been developed by various County departments is reviewed.

Section VI summarizes the calculation of applicable development charges and the resulting calculated development charges by class and type of development.

Section VII compares the calculated development charges with those currently in force in the County.

Section VIII presents a cost of growth analysis, which considers an Asset Management Plan for the County, demonstrating the financial sustainability of assets over the life cycle of the 2022 Development Charges By-law and satisfying the requirements of the recent amendments to the *DCA*. Additionally, the long-term operating impacts of the projects considered under this study are reviewed.

Section IX provides a review of development charges administrative matters and consideration of area rating.

2. A COUNTY-WIDE METHODOLOGY ALIGNS COSTS AND BENEFITS

Several key steps are required when calculating any development charge. However, specific circumstances arise in each municipality that must be reflected in the calculation.

Therefore, the study has been tailored to the local conditions that exist in the County of Peterborough. The approach to the proposed development charges is focused on providing a reasonable alignment of development-related costs with the development that necessitates them. The study uses a County-wide approach for General Services as well as the Services Related to a Highway, which is consistent with past practice, and is deemed the best approach to align development-related costs and benefits.

A. COUNTY-WIDE DEVELOPMENT CHARGES ARE CALCULATED

The County of Peterborough provides a wide range of services to the community it serves and has an extensive inventory of facilities, land, infrastructure, vehicles and equipment. The *DCA* provides municipalities with flexibility to define services that will be included in the development charge by-laws, provided that the other provisions of the Act and its associated regulations are met. The *DCA* also requires the by-laws to designate the areas within which the DCs shall be imposed. Development charges may apply to all lands in the municipality or to other designated development areas as specified in the by-laws.

For all of the development charge eligible services that the County provides, the full range of capital facilities, land, equipment and infrastructure is available throughout the County. A widely accepted method for recovering the development-related capital costs for such services is to apportion them over all new development anticipated in Peterborough County.

The following services are included in the County-wide development charge calculation:

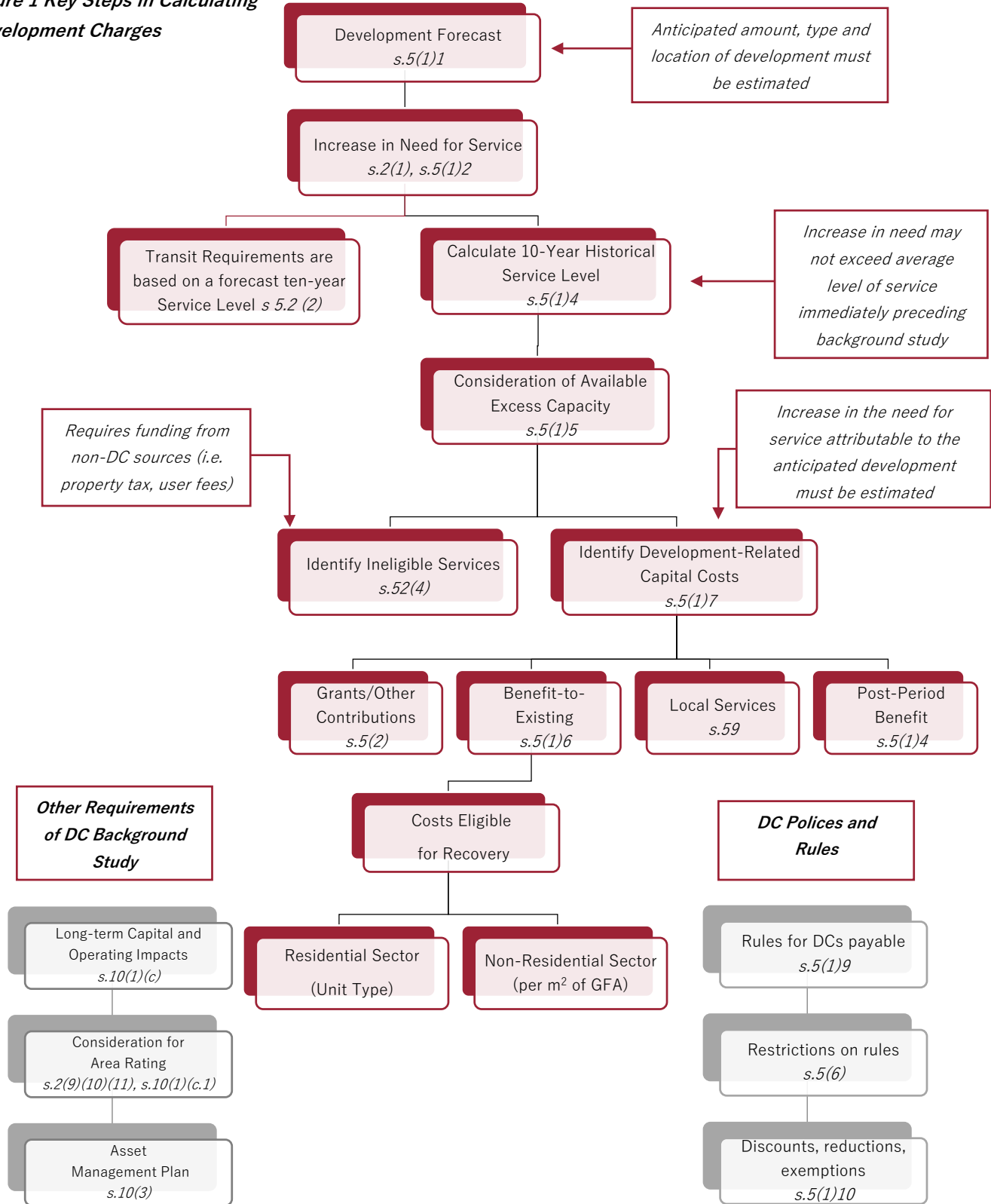
- Emergency Medical Services
- Long-Term Care
- Health Unit
- Waste Diversion
- Development-Related Studies
- Services Related to a Highway

These services form a reasonable basis upon which to plan and administer the development charges. It is noted that the analysis of each of these services examines the individual capital facilities and equipment currently in place. The resulting development charge for these services is to be imposed against all development anywhere in the County.

B. KEY STEPS IN DETERMINING DEVELOPMENT CHARGES FOR FUTURE DEVELOPMENT-RELATED PROJECTS

Several key steps are required in calculating DCs for future development-related projects. These are summarized in Figure 1 below and discussed further in the following sections.

Figure 1 Key Steps in Calculating Development Charges



i. Development Forecast

The first step in the methodology requires that a development forecast be prepared for the planning periods, from 2022 to 2031 for the General Services, and from 2022 to 2051 for Services Related to a Highway. The forecast is consistent with the County's current growth forecast and land needs assessment currently being finalized.

For the residential portion of the forecast, the net population growth, population growth in new units, and adjusted population growth (which includes population in seasonal or non-permanent dwellings) is estimated. The adjusted population growth determines the need for additional facilities and provides the foundation for the development-related capital program.

When calculating the development charge however, the development-related net capital costs are spread over the total additional population that occupy new housing units. This population in new units represents the population from which development charges will be collected.

The non-residential portion of the forecast estimates the Gross Floor Area (GFA) of building space to be developed over the ten-year period, 2022 to 2031, for General Services and over the thirty-year period, 2022 to 2051, for Services Related to a Highway. The forecast of GFA is based on an employment forecast for the County. Factors for floor space per worker are used to convert the employment forecast into GFA.

ii. Service Categories and Historical Service Levels

The *DCA* provides that the increase in the need for service attributable to anticipated development:

... must not include an increase that would result in the level of service exceeding the average level of that service provided in the municipality over the ten-year period immediately preceding the preparation of the background study...(s. 5. (1) 4.)

Historical ten-year average service levels thus form the basis for development charges. A review of the County's capital service levels for buildings, land, vehicles and so on, has therefore been prepared as a reference for the calculation, so that the portion of future capital projects that may be included in the development charge can be determined. The historical service levels used in this study have been calculated based on the period 2012 to 2021.

iii. **Development-Related Capital Program and Analysis of Net Capital Costs to be included in the Development Charges**

A development-related capital program has been prepared by County staff as part of the study. The program identifies development-related projects and their gross and net costs, after allowing for capital grants, subsidies or other contributions as required by the *Act* (*DCA*, s. 5. (2)). The capital program provides another cornerstone upon which development charges are based. The *DCA* requires that the increase in the need for service attributable to the anticipated development may include an increase:

... only if the council of the municipality has indicated that it intends to ensure that such an increase in need will be met. (s. 5. (1) 3.)

In conjunction with *DCA*, s. 5. (1) 4. referenced above, these sections have the effect of requiring that the development charge be calculated on the lesser of the historical ten-year average service levels or the service levels embodied in future plans of the County. The development-related capital program prepared for this study ensures that development charges are only imposed to help pay for projects that have been or are intended to be purchased or built in order to accommodate future anticipated development. It is not sufficient in the calculation of development charges merely to have had the service in the past. There must also be a demonstrated commitment to continue to emplace facilities or infrastructure in the future. In this regard, *Ontario Regulation 82/98*, s. 3 states that:

For the purposes of paragraph 3 of subsection 5 (1) of the Act, the council of a municipality has indicated that it intends to ensure that an increase in the need for service will be met if the increase in service forms part of an Official Plan, capital forecast or similar expression of the intention of the council and the plan, forecast or similar expression of the intention of the council has been approved by the council.

For some projects in the development-related capital forecast, a portion of the project may confer benefits to existing residents. As required by the *DCA*, s. 5. (1) 6., these portions of projects and their associated net costs are the funding responsibility of the County from non-development charge sources. The amount of County funding for such shares is also identified as part of the preparation of the capital forecast.

There is also a requirement in the *DCA* to reduce the applicable development charge by the amount of any “uncommitted excess capacity” that is available for a service. Adjustments are made in the analysis to meet this requirement of the *Act*. This requirement has been addressed through the use of “net” population and employment in the determination of

maximum permissible funding envelopes. Furthermore, the County's capital programs, and the need for increased capacity, reflects available and useable capacity within existing infrastructure and facilities.

iv. Attribution to Types of Development

The next step in the determination of development charges is the allocation of the development-related net capital costs between the residential and non-residential sectors. This is done using apportionments for different services in accordance with the demands which the two sectors would be expected to place on the various services and the different benefits derived from those services.

Where reasonable data exist, the apportionment is based on the expected demand for, and use of, the service by each sector (e.g. shares of population in new units and employment).

Finally, the residential component of the development charge is applied to different housing types on the basis of average occupancy factors. The non-residential component is applied on the basis of building GFA in square metres.

3. DEVELOPMENT FORECAST

This section provides the basis for the development forecasts used to calculate the development charges, as well as a summary of the forecast results. The forecasts of population, households and employment are consistent with the County's overall Growth Forecast and Land Needs Assessment Study approved for use in this DC Study. The long-term forecast also aligns with the County forecast outlined in Schedule 3 of the *Growth Plan for the Greater Golden Horseshoe*.

A more detailed summary of the forecasts, including tables illustrating historical trends and forecast results is provided in Appendix A.

A. RESIDENTIAL FORECAST

Development charges are levied on residential development as a charge per new unit. Therefore, for the residential forecast, a projection of both the *population growth*¹ as well as the *population in new units* is required.

- The *population growth* determines the need for additional facilities and provides the foundation for the development-related capital program.
- When calculating the development charge, however, the development-related net capital costs are spread over the total additional population that occupy new housing units. This population in new units represents the population from which development charges will be collected.

Table 1 provides a summary of the residential forecast for two planning periods: a ten-year planning period, from 2022 to 2031, and a longer-term planning period from 2022 to 2051. As noted in Section 2, for development charge calculation purposes the ten-year planning period is applicable to the General Services and the longer-term development forecast has been utilized in the calculation of the Services Related to a Highway development charge.

As shown on Table 1, the County's census population, is forecast to increase by 7,500 over the next ten years, reaching nearly 69,900 by 2031. The longer-term population is forecast to grow by 17,800, reaching 80,200 in 2051. The 2051 census population equates to a "total population" of 82,000 which is used for planning purposes and consistent with the County's

¹ Commonly referred to as "net population growth" in the context of development charges.

ongoing Growth Forecast and Land Needs Assessment study and those forecasts outlined in Schedule 3 of the *Growth Plan for the Greater Golden Horseshoe*

Over the ten-year planning period from 2022 to 2031, the number of new occupied dwelling units is forecast to increase by 3,000. This translates to population growth in new units of 7,700. Over the longer-term planning period the forecast is for growth of 9,600 dwelling units. The population residing in these new units is forecast at 24,200.

B. NON-RESIDENTIAL FORECAST

Development charges are levied on non-residential development as a charge per square metre of GFA. As with the residential forecast, the non-residential forecast requires both a projection of employment growth as well as a projection of the employment growth associated with new floor space in the County.

The non-residential forecast projects an increase of approximately 3,100 jobs to 2031 and 8,600 jobs to 2051 across three different employment types (Population Related, Employment Land and Rural). Further details on these types of employment are provided in Appendix A. The employment growth will be accommodated in 301,300 square metres of new non-residential building space to 2031 and 826,600 square metres of new space to 2051.

Table 1 summarizes the non-residential development forecasts.

TABLE 1

COUNTY OF PETERBOROUGH
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL GROWTH FORECAST

Residential Growth Forecast	2021 Estimate	General Services 2022 - 2031		Services Related to a Highway 2022 - 2051	
		Growth	Total at 2031	Growth	Total at 2051
Total Dwellings (incl. Seasonal)	33,990	3,020	37,010	9,610	43,600
<i>Occupied</i>	<i>25,090</i>	<i>3,020</i>	<i>28,110</i>	<i>9,610</i>	<i>34,700</i>
<i>Seasonal</i>	<i>8,900</i>	-	<i>8,900</i>	-	<i>8,900</i>
 <i>Census Population ¹</i>	 <i>62,445</i>	 <i>7,503</i>	 <i>69,948</i>	 <i>17,753</i>	 <i>80,198</i>
Population Growth In New Dwelling Units		7,651		24,152	

Note 1: Census Population excludes census undercoverage which is estimated at 2.20%. The census population in 2051 is equal to 82,000 total population and consistent with the planning targets approved

Non-Residential Growth Forecast	2021 Estimate	General Services 2022 - 2031		Services Related to a Highway 2022 - 2051	
		Growth	Total at 2031	Growth	Total at 2051
Place of Work Employment	13,139	3,139	16,278	8,582	21,722
<i>Population Related</i>	<i>3,638</i>	<i>479</i>	<i>4,117</i>	<i>1,468</i>	<i>5,106</i>
<i>Employment Land</i>	<i>2,882</i>	<i>2,499</i>	<i>5,382</i>	<i>6,780</i>	<i>9,662</i>
<i>Rural</i>	<i>6,619</i>	<i>160</i>	<i>6,780</i>	<i>334</i>	<i>6,953</i>
Non-Residential Building Space (m ²)		301,289		826,578	

Excludes work at home employment

4. SUMMARY OF HISTORICAL CAPITAL SERVICE LEVELS

The *DCA* and *Ontario Regulation 82/98* require that the development charges be set at a level no higher than the average level of service provided in the municipality over the ten-year period immediately preceding the preparation of the background study, on a service by service basis.

For General Services the legislative requirement is met by documenting historical service levels for the preceding ten years, in this case, for the period from 2012 to 2021. Typically, service levels for General Services are measured as a ratio of inputs per capita, or per capita plus employment.

O. Reg. 82/98 requires that when determining historical service levels, both quantity and quality of service be taken into consideration. In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square feet per capita. The qualitative aspect is introduced by the consideration of the monetary value of the facility or service. In the case of buildings, for example, the cost would be shown in terms of dollars per square foot to replace or construct a facility of the same quality. This approach helps to ensure that the development-related capital facilities that are to be charged to new development reflect not only the quantity (number and size) but also the quality (value or replacement cost) of service provided historically by the County. Both the quantitative and qualitative aspects of service levels used in the present analysis are based on information provided by County staff, based on historical records and experience with costs to acquire or construct similar facilities, equipment and infrastructure in 2021.

Table 2 summarizes service levels for all applicable services included in the development charge calculation. Appendix B provides the detailed historical inventory data upon which the calculation of service levels for the General Services is based. Further details regarding the Services Related to a Highway inventory of capital assets can be found in Appendix C.

TABLE 2

COUNTY OF PETERBOROUGH
SUMMARY OF AVERAGE HISTORICAL SERVICE LEVELS 2012 - 2021

Service	2012 - 2021 Service Level Indicator	
1.0 EMERGENCY MEDICAL SERVICES Buildings Land Vehicles Furniture & Equipment 2.0 LONG-TERM CARE Buildings Land Furniture & Equipment 3.0 HEALTH UNIT Buildings Land Vehicles Furniture & Equipment 4.0 WASTE DIVERSION Vehicles Furniture & Equipment	\$75.28 \$44.38 \$10.00 \$14.57 \$6.33 \$190.33 \$160.43 \$12.65 \$17.25 \$42.29 \$38.68 \$1.15 \$1.00 \$1.46 \$7.61 \$1.23 \$6.38	per capita & employment per capita & employment per capita & employment per capita & employment per capita & employment per capita per capita per capita per capita per capita & employment per capita & employment per capita & employment per capita & employment per capita & employment per capita & employment per capita & employment per capita & employment
1.0 SERVICES RELATED TO A HIGHWAY Buildings Land Roads Bridges & Culverts Vehicles Furniture & Equipment	\$10,089.88 \$93.45 \$116.21 \$7,474.58 \$2,293.55 \$110.59 \$1.50	per capita & employment per capita & employment per capita & employment per capita & employment per capita & employment per capita & employment per capita & employment

5. THE DEVELOPMENT-RELATED CAPITAL FORECAST

The *DCA* requires the Council of a municipality to express its intent to provide future capital facilities at the average historical service level incorporated in the development charges calculation. As noted in Section II, *Ontario Regulation 82/98*, s. 3 states that:

For the purposes of paragraph 3 of subsection 5 (1) of the Act, the council of a municipality has indicated that it intends to ensure that an increase in the need for service will be met if the increase in service forms part of an official plan, capital forecast or similar expression of the intention of the council and the plan, forecast or similar expression of the intention of the council has been approved by the council.

A. A DEVELOPMENT-RELATED CAPITAL FORECAST IS PROVIDED FOR COUNCIL'S APPROVAL

Based on the development forecasts summarized in Section III and discussed in detail in Appendix A, County staff, in collaboration with the consultants, have created a development-related capital forecast setting out those projects that are required to service anticipated development. For all General Services, the capital plan covers the ten-year period from 2022 to 2031. The development charges for Services Related to a Highway is based on development anticipated in the County to 2051.

One of the recommendations contained in this Background Study is for Council to adopt the capital forecast created for the purposes of the development charges calculation. It is assumed that future capital budgets and forecasts will continue to bring forward the development-related projects contained herein, that are consistent with the development occurring in the County. It is acknowledged that changes to the forecast presented here may occur through the County's normal capital budget process.

B. THE DEVELOPMENT-RELATED CAPITAL FORECAST FOR GENERAL SERVICES

The development-related capital forecast for the General Services is presented in Table 3. The table summarizes the cost of the capital plan for each services analysed over the ten-year planning period. Further details on the capital plans are available in Appendix B.

The gross cost of the development-related capital forecast for General Services is \$52.6 million. Grants and subsidies in the amount of \$34.5 million have been identified, with the

majority relating to the portions of these municipal works to be covered by other entities that share the service (such as the City of Peterborough). After accounting for these alternative funding sources, the net cost of the capital program is reduced to \$18.1 million.

Of the \$18.1 million net capital cost of the program for General Services, \$15.0 million (83 per cent) is related to Long-Term Care. This program provides for the expansion of the Fairhaven facility which will add 128 beds to the facility.

The net capital forecast for Development-Related Studies represents \$1.4 million (or 8 per cent) of the total general services program. This includes provisions for various development-related studies, including official plans, growth management studies, and a Shoreline/Watershed planning study.

The net capital cost of the Emergency Medical Services capital program is \$700,100 (4 per cent) and provides for a provision for new space, various vehicles and equipment and a Land Ambulance Master Plan.

The capital program associated with Waste Diversion amounts to \$535,000 (3 per cent) and provides for a 24/7 Hazardous Waste Site and Curb Side Organic Expansion.

The capital program associated with Health Unit totals \$485,000 (3 per cent) and provides for a provision for new space equal to a third of the existing space.

The General Services capital forecast incorporates those projects identified to be related to development anticipated in the next ten years. Not all of these costs are to be recovered from new development by way of development charges (see the following Section 6 for the method and determination of net capital costs attributable to development). Portions of the capital forecast may relate to providing services for development which has occurred prior to 2022 (for which development charge reserve fund balances exist), for replacement of existing capital facilities or for development anticipated to occur beyond the 2022 to 2031 planning period.

TABLE 3

COUNTY OF PETERBOROUGH

SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM

FOR GENERAL SERVICES (2022 - 2031)

(in \$000)

Service	Gross Cost	Grants/ Subsidies	Municipal Cost
1.0 EMERGENCY MEDICAL SERVICES	\$1,692.0	\$991.9	\$700.1
1.1 Buildings, Land & Furnishings	\$625.0	\$366.4	\$258.6
1.2 Vehicles & Equipment	\$992.0	\$581.5	\$410.5
1.3 Development-Related Studies	\$75.0	\$44.0	\$31.0
2.0 LONG-TERM CARE	\$45,000.0	\$30,000.0	\$15,000.0
2.1 Buildings, Land & Furnishings	\$45,000.0	\$30,000.0	\$15,000.0
3.0 HEALTH UNIT	\$3,975.0	\$3,490.0	\$485.0
3.1 Buildings, Land & Furnishings	\$3,975.0	\$3,490.0	\$485.0
4.0 WASTE DIVERSION	\$535.0	\$0.0	\$535.0
4.1 Buildings, Land & Furnishings	\$165.0	\$0.0	\$165.0
4.2 Curb Side Organic Expansion	\$370.0	\$0.0	\$370.0
5.0 DEVELOPMENT-RELATED STUDIES	\$1,380.0	\$0.0	\$1,380.0
5.1 Development-Related Studies	\$1,380.0	\$0.0	\$1,380.0
TOTAL - 10-YEAR GENERAL SERVICES	\$52,582.0	\$34,481.9	\$18,100.1

C. THE DEVELOPMENT-RELATED CAPITAL FORECAST FOR SERVICES RELATED TO A HIGHWAY

Table 4 summarizes the development-related capital recoveries for Services Related to a Highway. The capital program totals \$143.0 million and provides for infrastructure for anticipated development between 2022 and 2051. Further details on the inventory of capital assets and capital plans are available in Appendix C.

Grants and subsidies in the amount of \$100,000 have been identified against one project in the capital program.

The largest share of the net cost of the program (83 per cent) is associated with roadway upgrade and capacity expansion projects which total \$119.1 million, followed by projects associated with Intersection Improvements (5 per cent) which total \$6.7 million.

Other works include other infrastructure and committed projects (4 per cent or \$5.7 million), studies (3 per cent or \$4.2 million), James A. Gifford Causeway (2 per cent or \$3.5 million), buildings (2 per cent or \$2.7 million) and lastly vehicles and equipment (1 per cent or \$996,000).

TABLE 4
COUNTY OF PETERBOROUGH
SUMMARY OF DEVELOPMENT-RELATED CAPITAL PROGRAM
FOR (2022 - 2051)
(in \$000)

Service	Gross Cost	Grants/ Subsidies	Municipal Cost
1.0 SERVICES RELATED TO A HIGHWAY	\$142,966.0	\$100.0	\$142,866.0
1.1 Buildings, Land & Furnishings	\$2,721.0	\$0.0	\$2,721.0
1.2 Vehicles & Equipment	\$996.0	\$0.0	\$996.0
1.3 Studies	\$4,180.0	\$0.0	\$4,180.0
1.4 Intersection Improvements	\$6,755.0	\$100.0	\$6,655.0
1.5 Roadway Upgrades/Capacity Expansion	\$119,124.0	\$0.0	\$119,124.0
1.6 James A. Gifford Causeway	\$3,540.0	\$0.0	\$3,540.0
1.7 Other Infrastructure & Committed Projects	\$5,650.0	\$0.0	\$5,650.0

6. CALCULATED DEVELOPMENT CHARGES

This section summarizes the calculation of development charges for each service and the resulting total charges by sector. For all County services, the calculation of the development charge per capita (residential) and per square metre (non-residential) is reviewed.

For residential development, the total per capita amount is converted to a variable charge by housing unit type using unit occupancy factors. For non-residential development, the charges are based on the gross floor area of building space.

It is noted that the calculation of the County-wide development charges does not include any provision for exemptions required under the *DCA*, such as the exemption from the payment of DCs for enlargements of up to 50 per cent on existing industrial buildings. Such legislated exemptions, or other exemptions that Council may choose to provide, will result in loss of development charge revenue for the affected types of development. However, any such revenue loss may not be made up by offsetting increases in other portions of the calculated charge.

A. DEVELOPMENT CHARGES CALCULATION FOR GENERAL SERVICES

A summary of the residential and non-residential development charges for General Services is presented in Table 5. Further details of the calculation for each individual service are available in Appendix B.

The net capital forecast for the General Services totals \$18.1 million and incorporates those projects identified to be related to development anticipated in the next ten years. However, not all of the capital costs are to be recovered from new development by way of development charges. As shown on Table 5, 65 per cent of the net costs, or \$11.7 million, relates to replacement of existing capital facilities or for shares of projects that provide benefit to the existing community. These portions of capital costs will have to be funded from non-development charge revenue sources, largely property taxes for these services.

An additional share of \$1.7 million (9 per cent) has been identified as uncommitted development charges reserve funds and represents the revenue collected from prior growth in the County. This portion has been subtracted from the chargeable capital costs.

A share of \$1.4 million (8 per cent) is attributable to other development-related funding sources, including post-period benefit. This development-related share has been removed from the calculation though it may be recovered under future development charge studies.

The total net costs eligible for recovery through development charges for General Services is \$3.3 million (18 per cent). This amount is allocated between the residential and non-residential sectors to derive the development charges. Long-Term Care is deemed to benefit residential development only, while the remaining services are allocated between both residential and non-residential sectors based on shares of population in new units and employment growth in new space. The allocation to the residential sector for these services is calculated at 71 per cent with 29 per cent to the non-residential sector.

Approximately \$2.7 million of the General Services development charges eligible capital program is deemed to benefit residential development. When this amount is divided by the ten-year growth in population in new dwelling units (7,651), a charge of \$358.46 per capita results. The non-residential share totals \$536,900 and yields a charge of \$1.78 per square metre when divided by the ten-year increase in non-residential building space (301,289 square metres).

TABLE 5

COUNTY OF PETERBOROUGH
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
10-YEAR CAPITAL PROGRAM FOR GENERAL SERVICES

10 Year Growth in Population in New Units	7,651
10 Year Growth in Square Metres	301,289

Service	Development-Related Capital Program 2022 - 2031								
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Prior Growth (\$000)	Other Dev. Related (\$000)	Total DC Eligible Costs for Recovery (\$000)				
						Residential Share		Non-Residential Share	
	%	(\$000)	%	(\$000)					
1.0 EMERGENCY MEDICAL SERVICES	\$700.1	\$0.0	\$467.2	\$0.0	\$232.9	71%	\$165.39	29%	\$67.6
Development Charge Per Capita							\$21.62		
Development Charge Per Square Metre									\$0.22
2.0 LONG-TERM CARE	\$15,000.0	\$11,659.7	\$980.4	\$931.8	\$1,428.1	100%	\$1,428.11	0%	\$0.0
Development Charge Per Capita							\$186.66		
Development Charge Per Square Metre									\$0.00
3.0 HEALTH UNIT	\$485.0	\$0.0	\$232.1	\$0.0	\$252.9	71%	\$179.54	29%	\$73.3
Development Charge Per Capita							\$23.47		
Development Charge Per Square Metre									\$0.24
4.0 WASTE DIVERSION	\$535.0	\$0.0	\$1.3	\$452.6	\$81.1	71%	\$57.58	29%	\$23.5
Development Charge Per Capita							\$7.53		
Development Charge Per Square Metre									\$0.08
5.0 DEVELOPMENT-RELATED STUDIES	\$1,380.0	\$65.0	\$30.6	\$0.0	\$1,284.4	71%	\$911.92	29%	\$372.5
Development Charge Per Capita							\$119.19		
Development Charge Per Square Metre									\$1.24
TOTAL 10-YEAR GENERAL SERVICEES	\$18,100.1	\$11,724.7	\$1,711.6	\$1,384.4	\$3,279.4	\$2,742.53		\$536.9	
Development Charge Per Capita						\$358.46			
Development Charge Per Square Metre								\$1.78	

B. DEVELOPMENT CHARGES CALCULATION FOR SERVICES RELATED TO A HIGHWAY

Table 6 displays the calculation of the rates for Services Related to a Highway. The development-related infrastructure will be used to service development in the County over the longer-term between 2022 and 2051.

Of the total Services Related to a Highway net capital program (\$142.9 million), \$19.2 million (13 per cent) is attributable to the replacement of existing infrastructure or for shares of projects that provide benefit to the existing community. This amount has been netted off the chargeable capital costs.

An additional share of \$3.4 million (2 per cent) has been identified as development charges reserve funds and represents the revenue collected from prior growth. This portion has also been subtracted from the chargeable capital costs. No shares have been attributed to other development-related sources (including post-period benefit).

The remaining \$120.3 million is related to development in the planning period and has been included in the development charge calculation.

Similar to the General Services capital program, the capital program eligible for recovery through development charges is allocated to the residential and non-residential sectors based on future shares of population in new units and employment growth over the planning period. On this basis, the allocation to the residential and non-residential sectors is calculated at 74 per cent and 26 per cent respectively for Services Related to a Highway.

Of the total development charge eligible cost for the Services Related to a Highway, \$89.0 million is deemed to benefit residential development. When this amount is divided by the long-term growth in population in new dwelling units (24,152) a charge of \$3,684.69 per capita results.

The non-residential share totals \$31.3 million and, when this amount is divided by the long-term forecast of building space growth (826,578 square metres) a charge of \$37.83 per square metre results.

TABLE 6
COUNTY OF PETERBOROUGH
SUMMARY OF RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES
CAPITAL PROGRAM FOR SERVICES RELATED TO A HIGHWAY TO 2051

2022 - 2051 Year Growth in Population in New Units		24,152
2022 - 2051 Year Growth in Square Metres		826,578

Service	Development-Related Capital Program 2022 - 2051								
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Prior Growth (\$000)	Other Dev. Related (\$000)	Total DC Eligible Costs for Recovery (\$000)	Residential		Non-Residential	
						Share		Share	
						%	(\$000)	%	(\$000)
1.0 SERVICES RELATED TO A HIGHWAY	\$142,866.0	\$19,176.8	\$3,428.6	\$0.0	\$120,260.7	74%	\$88,992.9	26%	\$31,267.8
Development Charge Per Capita							\$3,684.69		
Development Charge Per Square Metre									\$37.83

C. RESIDENTIAL & NON-RESIDENTIAL DEVELOPMENT CHARGES

Table 7 summarizes the cumulative total for the residential development charges rates. The total per capita rate for all services is \$4,043.15

TABLE 7

COUNTY OF PETERBOROUGH
COUNTY-WIDE DEVELOPMENT CHARGES
RESIDENTIAL DEVELOPMENT CHARGES BY UNIT TYPE

Service	Calculated Charge Per Capita	Residential Charge by Unit Type ¹			Percentage of Charge
		Singles/Semis	Rows	Apartments	
Emergency Medical Services	\$21.62	\$59	\$50	\$36	0.5%
Emergency Measures	\$0.00	\$0	\$0	\$0	0.0%
Long-Term Care	\$186.66	\$506	\$429	\$312	4.6%
Social Services	\$0.00	\$0	\$0	\$0	0.0%
Health Unit	\$23.47	\$64	\$54	\$39	0.6%
Waste Diversion	\$7.53	\$20	\$17	\$13	0.2%
Transit	\$0.00	\$0	\$0	\$0	0.0%
Development-Related Studies	\$119.19	\$323	\$274	\$199	2.95%
Total General Services	\$358.46	\$971	\$824	\$599	8.9%
Services Related To A Highway	\$3,684.69	\$9,985	\$8,475	\$6,153	91.1%
TOTAL COUNTY-WIDE CHARGE PER UNIT	\$4,043.15	\$10,957	\$9,299	\$6,752	100.0%
¹ Based on a Persons Per Unit of:		2.71	2.30	1.67	

Residential County-wide development charges are proposed to vary by dwelling unit type to reflect their different occupancy factors and resulting demand for services. As shown in Table 7, the calculated charges are \$10,957 per single detached unit, \$9,299 per row house, or other type of multiple unit, and \$6,752 per apartment unit.

These cumulative non-residential charges are displayed in Table 8, with a total charge of \$39.61 per square metre.

TABLE 8

**COUNTY OF PETERBOROUGH
COUNTY-WIDE DEVELOPMENT CHARGES
NON-RESIDENTIAL DEVELOPMENT CHARGES PER SQUARE METRE**

Service	Calculated Charge Per Square Metre	Percentage of Charge
Emergency Medical Services	\$0.22	0.6%
Emergency Measures	\$0.00	0.0%
Long-Term Care	\$0.00	0.0%
Social Services	\$0.00	0.0%
Health Unit	\$0.24	0.6%
Waste Diversion	\$0.08	0.2%
Transit	\$0.00	0.0%
Development-Related Studies	\$1.24	3.1%
Total General Services	\$1.78	4.5%
Services Related To A Highway	\$37.83	95.5%
TOTAL COUNTY-WIDE CHARGE PER UNIT	\$39.61	100.0%

7. COMPARISON OF CALCULATED & CURRENT DCs

Tables 9 and 10 compare the newly calculated residential and non-residential development charges with the County's current charges (as of January 14th, 2021). Please note, County Council did not opt to index/adjust the DC rates with the most recent non-residential construction price index.

Table 9 shows that the calculated residential development charge for a single detached unit increases by \$2,376 per unit, or 28 per cent, from \$8,581 per unit to \$10,957 per unit.

The calculated development charge for non-residential development is \$39.61 per square meter, which is an increase of \$26.36 over the existing County rate of \$13.25 per square metre.

It should be noted that no charge is included for Emergency Measures, Social Services and Transit in this study as there are no development-related capital works being undertaken during the planning horizon. The overall rate increase is related to the road infrastructure needs required to service new development.

TABLE 9

COUNTY OF PETERBOROUGH
COMPARISON OF CURRENT AND CALCULATED
RESIDENTIAL DEVELOPMENT CHARGES

Service	Current Residential (\$/SDU)	Calculated Residential (\$/SDU)	Difference in Charge	
Emergency Medical Services	\$292	\$59	-\$233	-80%
Emergency Measures	\$28	\$0	-\$28	-100%
Long-Term Care	\$406	\$506	\$100	25%
Social Services	\$238	\$0	-\$238	-100%
Health Unit	\$130	\$64	-\$66	-51%
Waste Diversion	\$1	\$20	\$20	2277%
Transit	\$6	\$0	-\$6	-100%
Development-Related Studies	\$61	\$323	\$262	430%
Total General Services	\$1,161	\$971	-\$190	-16%
Services Related To A Highway	\$7,420	\$9,985	\$2,565	35%
TOTAL COUNTY-WIDE CHARGE PER UNIT	\$8,581	\$10,957	\$2,376	28%

TABLE 10

**COUNTY OF PETERBOROUGH
COMPARISON OF CURRENT AND CALCULATED
NON-RESIDENTIAL DEVELOPMENT CHARGES**

Service	Current	Calculated	Difference in Charge	
	Non-Residential (\$/Square Metre)	Non-Residential (\$/Square Metre)		
Emergency Medical Services	\$0.45	\$0.22	-\$0.23	-50%
Emergency Measures	\$0.04	\$0.00	-\$0.04	-100%
Long-Term Care	\$0.63	\$0.00	-\$0.63	-100%
Social Services	\$0.37	\$0.00	-\$0.37	-100%
Health Unit	\$0.20	\$0.24	\$0.04	22%
Waste Diversion	\$0.00	\$0.08	\$0.08	5791%
Transit	\$0.01	\$0.00	-\$0.01	-100%
Development-Related Studies	\$0.09	\$1.24	\$1.14	1214%
Total General Services	\$1.79	\$1.78	-\$0.01	-1%
Services Related To A Highway	\$11.46	\$37.83	\$26.37	230%
TOTAL COUNTY-WIDE CHARGE PER UNIT	\$13.25	\$39.61	\$26.36	199%

8. COST OF GROWTH ANALYSIS

This section summarizes the examination of the long-term capital and operating costs as well as the asset management-related annual provisions for the capital facilities and infrastructure to be included in the DC By-law(s). The examination is required as one of the provisions of the *DCA*. Additional details on the cost of growth analysis, including asset management analysis, are included in Appendix E.

A. ASSET MANAGEMENT PLAN

Tables 11 and 12 summarize the annual capital provisions required to replace the capital infrastructure proposed to be funded under the development charges by-law. This estimate is based on information obtained through discussions with County staff regarding useful life assumptions and the capital cost of acquiring and/or constructing each asset.

Tables 11 and 12 illustrate that, by 2032 and 2052, the County will need to fund an additional \$49,100 and \$1.2 million per annum respectively in order to properly fund the full life-cycle costs of the new assets supported under the DC by-law. The calculated annual funding provision should be considered within the context of the County's projected growth; over the next ten years (to 2031) the County is projecting an increase of 3,000 total private dwellings units, which represents a 9 per cent increase over the existing base and an increase of 9,600, or a 28 per cent increase, over the next 30 years (to 2051).

Additionally, 3,100 new employees occupying 301,300 square metres of non-residential building space are anticipated in Peterborough County over the next ten years and 8,600 employees occupying 826,600 square metres are expected by 2051. This growth will have the effect of increasing the overall assessment base and additional user fee and charges revenues to offset the capital asset provisions required to replace the infrastructure proposed to be funded under the DC by-law.

TABLE 11

**COUNTY OF PETERBOROUGH
ANNUAL ASSET MANAGEMENT PROVISION BY 2032**

Service	2022-2031 Capital Program		Calculated AMP Annual Provision by 2032	
	DC Related	Non-DC Related*	DC Related	Non-DC Related
Emergency Medical Services	\$ 700,100	\$ 991,900	\$ 23,600	\$ 33,500
Long-Term Care	\$ 2,408,500	\$ 42,591,500	\$ 20,800	\$ 368,100
Health Unit	\$ 485,000	\$ 3,490,000	\$ 4,000	\$ 29,000
Waste Diversion	\$ 82,400	\$ 452,600	\$ 700	\$ 14,600
Development-Related Studies	\$ 1,315,000	\$ 65,000	\$ -	\$ -
Total	\$ 4,991,000	\$ 47,591,000	\$ 49,100	\$ 445,200

*Includes costs that will be recovered in future development charge studies (i.e. post-period benefit)

TABLE 12

**COUNTY OF PETERBOROUGH
ANNUAL ASSET MANAGEMENT PROVISION BY 2052**

Service	2022-2051 Capital Program		Calculated AMP Annual Provision by 2052	
	DC Related	Non-DC Related*	DC Related	Non-DC Related
Services Related To A Highway	\$ 123,689,300	\$ 19,276,800	\$ 1,197,600	\$ 175,700
Total	\$ 123,689,300	\$ 19,276,800	\$ 1,197,600	\$ 175,700

*Includes costs that will be recovered in future development charge studies (i.e. post-period benefit)

B. LONG-TERM CAPITAL & OPERATING COSTS

Appendix E summarizes the estimated increase in net operating costs that the County will experience for additions associated with the planned capital forecast. Table 13 summarizes the estimated increase in net operating costs that the County will experience for additions associated with the planned capital program.

The County's annual net operating costs are estimated to increase by \$2.7 million by 2031.

Appendix E also summarizes the components of the development related capital program that will require funding from non development charge sources. Of the \$161.0 million net capital cost of all services, about \$30.9 million will need to be funded from non-development charge sources over the next 10 to 30 years. This is entirely related to shares

of projects related to facility and infrastructure replacement and for non-development-related shares of projects that provide benefit to the existing community.

Council is made aware of these estimates so that they understand the financial implications of the quantum and timing of the projects included in the development related capital forecast in this study.

C. THE PROGRAM IS DEEMED TO BE FINANCIALLY SUSTAINABLE

In summary, the asset management plan and long-term capital and operating analysis contained in Appendix E demonstrates that the County can afford to invest and operate the identified general and engineered services infrastructure over the ten-year and longer-term planning period.

Importantly, the County's annual budget review allows staff to continue to monitor and implement mitigating measures should the program become less sustainable.

TABLE 13

COUNTY OF PETERBOROUGH
SUMMARY OF LONG TERM CAPITAL AND
OPERATING COST IMPACTS
(in thousands of constant dollars)

	2031
Net Operating Impacts (1)	
Emergency Medical Services	\$200.7
Long-Term Care	\$1,500.0
Health Unit	\$97.0
Waste Diversion	\$107.0
Development-Related Studies	\$0.0
Services Related To A Highway	\$755.0
NET OPERATING IMPACTS	\$2,659.7

	Total to 2031	Total to 2051 (4)
Long-term Capital Impact (1)		
Total Net Cost	\$18,100.1	\$142,866.0
Net Cost from Development Charges	\$3,279.4	\$120,260.7
Prior Growth Share from DC Reserve Balances (2)	\$1,711.6	\$3,428.6
Portion for Other Development-Related (3)	\$1,384.4	\$0.0
Funding from Non-DC Sources		
Replacement	\$11,724.7	\$19,176.8
FUNDING FROM NON-DC SOURCES	\$11,724.7	\$19,176.8

Notes:

(1) See Appendix E

(2) Existing development charge reserve fund balances collected from growth prior to 2022 are applied to fund initial projects in development-related capital forecast

(3) Other development-related net capital costs may be eligible for development charge funding in future DC by-laws

(4) The total to 2031 only accounts for general services. The 2051 total accounts for Services Related to a Highway between 2021 and 2051.

9. ADMINISTRATION AND COLLECTION

This section sets out the DCA requirements in respect of DC collection and administration.

A. DEVELOPMENT CHARGES ADMINISTRATION AND COLLECTION

The DCA requirements in respect of the collection of DCs, certification and remittance, as well as reserve fund management are outlined in this section.

i. Collection, Certification, and Remittance of Development Charges

If a DC is imposed by an upper-tier municipality on a development in an area municipality:

- The treasurer of the upper-tier municipality shall certify to the treasurer of the area municipality that the charge has been imposed, the amount of the charge, the manner in which the charge is to be paid and when the charge is payable.
- The treasurer of the area municipality shall collect the charge when it is payable and shall, unless otherwise agreed by the upper-tier municipality, pay the charge to the treasurer of the upper-tier municipality on or before the 25th day of the month following the month in which the charge is received by the area municipality.
- If the charge is collected by the upper-tier municipality, the treasurer of the upper-tier municipality shall certify to the treasurer of the area municipality that the charge has been collected.

An upper-tier municipality may agree with an area municipality to collect DCs only in cases where the upper-tier municipality issues building permits.

Upon passage of a County DC by-law, the County Treasurer must certify the following to the Area Municipal Treasurers:

- That development charges have been imposed
- The amount of the development charge that has been imposed
- The manner in which the development charges are to be paid
- The date when the development charges are payable

ii. DC Amount Payable and Date of Payment

The total amount of a DC is the amount of the DC that would be determined under the by-law on the day of an application for site plan approval or the day of an application for rezoning or, if neither of these apply, the day of building permit issuance. Full details on determining the DCs payable in any particular case are provided in s.26 and s.26.2 of the *DCA*.

The default date of payment of a DC is the date of building permit issuance. However, under s.27 of the *DCA* the County may enter into an agreement with a developer to alter the timing of payment.

For three specific types of development DCs must be paid according to the following plan:

- Six equal annual installments beginning at building occupancy (permit or actual occupancy) and for the following five anniversaries of that date for rental housing and institutional development.
- Twenty-one equal annual installments beginning at building occupancy (permit or actual occupancy) and for the following twenty anniversaries of that date for non-profit housing development.

For required instalments, the County may charge interest from the date the DC would have been payable to the date the instalment is paid. Interest may accrue on each installment until the final payment has been made. Any skipped or late payments can be added to the tax roll (including interest). Full details on the prescribed payment plans are provided in s.26.1 of the *DCA*.

iii. Reserve Funds

Under the *DCA*, a municipality that has passed a development charge by-law must establish a separate reserve fund for each service to which the development charge relates and pay each development charge it collects into the respective reserve fund. While the *DCA* does permit municipalities to borrow from the reserve fund, the amount borrowed is to be repaid with interest at a rate not less than the prescribed minimum interest rate. Additionally, money in the reserve fund is to be spent only on development-related capital costs.

Annual financial statements are to be provided to Council and must include the following:

- Opening and closing balances and in-year transactions
- A description of service or category of service
- Details on credits paid by individual credit holders
- Amounts borrowed and purpose of borrowing
- Interest accrued on borrowing
- Amount and source of money used to repay borrowing
- Projects funded from DCs including amount and source of DC and non-DC funding

Statutory and non-statutory exemptions should be funded from non-DC sources.

iv. Recommendations

- As required under the DCA, the County should codify any rules regarding application of the by-law and exemptions within the DC by-law proposed for adoption.
- It is recommended that Council adopt the development-related capital forecast included in this Background Study, subject to annual review through the County's normal capital budget process.
- It is recommended that limited exemptions, other than those required in the DCA, be formally adopted in the by-laws.
- It is recommended that the County continue to include indexing provisions in the by-law so as to ensure that the DC rates incorporate inflationary increases over the by-law term.

B. CONSIDERATION FOR AREA RATING

In accordance with the *DCA*, Council must consider the use of area rating, also known as area-specific development charges, as part of the DC Background Study. As part of the County's 2022 DC update none of the services considered are appropriate to recover on an area-specific basis and as such only County-wide services are included in the study.

The County-wide approach to DCs follows the directive of County Council DC Steering Committee, which considered the use of area-specific DCs in its meeting on June 17, 2021 (Resolution 282-2021).

C. LOCAL SERVICE POLICY

The County of Peterborough administers a series of local service guidelines, policies and principles, as adopted by County Council in November 2019, considering if the project will be completely, or in part, funded from development charges.

Local services mean those services or facilities which are under the jurisdiction of the municipality and are related to a plan of subdivision or within the area to which the plan relates, required as a condition of approval under s. 51 of the *Planning Act*, or as a condition of approval under s. 53 of the *Planning Act*.

APPENDIX A

DEVELOPMENT FORECAST

APPENDIX A: DEVELOPMENT FORECAST

This appendix summarizes the development forecast used to prepare the 2022 Development Charges Background Study for the County of Peterborough. The forecast results are presented in the following tables:

Historical Development

Table A-1	Historical Population, Household & Employment Summary
Table A-2	Historical Occupied Households by Unit Type
Table A-3	Historical Annual Growth in Occupied Households by Unit Type
Table A-4	Historical Households by Period of Construction Showing Household Size
Table A-5	Historical Place of Work Employment

Forecast Development

Table A-6	Population, Household & Employment Forecast Summary
Table A-7	Forecast of Occupied Households by Unit Type
Table A-8	Forecast of Annual Growth in Occupied Households by Unit Type
Table A-9	Forecast Population in New Households by Unit Type
Table A-10	Forecast of Place of Work Employment
Table A-11	Employment Growth in New Non-Residential Space by Category

A. FORECAST APPROACH AND KEY ASSUMPTIONS

The *Development Charges Act* (DCA) requires the County to estimate “the anticipated amount, type and location of development” for which development charges may be imposed. The forecast must cover both residential and non-residential development and be specific enough with regards to the quantum, type, location and timing of such development to allow the County to prepare a reasonable development-related capital program.

The forecasts of population, households and employment are consistent with the County’s overall Growth Forecast and Land Needs Assessment Study approved for use in this DC Study. The long-term forecast also aligns with the County forecast outlined in Schedule 3 of the *Growth Plan for the Greater Golden Horseshoe*. The growth allocations at the lower-tier level are currently being finalized as part of the Growth Forecast and Land Needs Assessment Study. The technical memorandums completed as part of the Transportation Master Plan Study utilized the working growth allocations to inform the modelling.

A ten-year development forecast, from 2022 to 2031, has been used to calculate the development charges for the general services in the County. For Services Related to a Highway, a longer-range forecast, from 2022 to 2051, has been used which corresponds to the ultimate planning horizon outlined in the *Growth Plan* and the infrastructure needs identified through the ongoing Transportation Master Plan.

B. HISTORICAL DEVELOPMENT IN THE COUNTY

Historical population and employment set out in this appendix are used to determine the average service levels attained in the County over the last ten years (2012 to 2021). Since 2016 was the last year of complete Census datasets¹ with 2021 information recently released for population and households, these figures have been updated using the new census data while other areas of the forecasts remain estimates.

Population figures shown in the development forecast represent mid-year estimates.

Population figures account for:

- population recorded in the Census (“Census population”). This definition does not include the Census net under-coverage (2.2 per cent of the Census population in Peterborough) which represents those who were missed or double-counted by the Census;
- seasonal residents who typically maintain a primary place of residence outside the County.

Similarly, the forecasts of households and housing units account for both permanently occupied households and households that are occupied only part of the year. The population in these non-permanent units is based on a Persons Per Unit (PPU) assumption of 3.0. This non-permanent population is added to the Census population to derive the total adjusted population used for the development charges calculation.

Historical growth figures presented in Table A-1 are based on Statistics Canada Census. Figures shown in the development forecast represent mid-year estimates.

¹ 2021 population and Household numbers were only just released prior to the release of this study. The information released by census thus far did not include further details on household patterns in new units, breakdown of dwelling unit forms or migration data. Furthermore, employment information has yet to be released.

Table A-1 shows that Peterborough County has experienced considerable population growth in recent years. The County's census population increased by nearly 7,600 over the last decade and is now estimated to be 62,400 in 2021; the vast majority of that growth, 6,700 persons, occurred after 2016.

Historical employment figures are also shown in Table A-1 and are based on Statistics Canada place of work data. "Place of Work Employment" figures record where people work rather than their place of residence. It includes all employment with a regular or no fixed place of work. However, work-at-home employment is excluded from the figures as, for development charge purposes, this type of employment is considered not to require building floor space for its activities. Employment growth in the County has generally increased throughout the period, with the number of jobs estimated around 13,100 in 2021. The County's current activity rate is 21 per cent and has remained relatively consistent over the last decade.

As with recent population growth, the number of permanently occupied dwellings in the County increased over the last decade, from approximately 21,700 in 2011 to 25,100 in 2021, with growth accelerating since 2016. The number of seasonally occupied dwellings has decreased by about 800 units over the same period.

The dominant type of housing in Peterborough County is the Single/Semi-detached home, which accounts for 95 per cent of all units in the County (see Table A-2). Table A-3 further expands on the annual growth in occupied units by type. Although single/semi-detached units are still the primary unit type shown, there has been additional growth in rows and apartments since 2012.

Table A-4 provides details on historical occupancy patterns for permanently occupied households in Peterborough County. Occupancy levels for recently constructed units, built between 2006 and 2016, are higher than the overall average and are generally used to support the development charges calculations since they better reflect the number of people that are likely to reside in new development. The average PPU of single detached units built in the County in the period 2006 to 2016 is 2.71. For the purpose of this study, PPU levels of 2.30 is assumed for row/other multiple units as the data is limited and a PPU of 1.67 is used for apartments which represents the overall occupancy for these unit types.

Table A-5 further details historical place of work employment in the County based on Statistics Canada Census information. In the last ten years, place of work employment (used for the DC Study) has increased by approximately 1,600 (when excluding work at home employment). As previously indicated, 2021 Census employment information has yet to be released and the information in this table is estimated.

C. FORECAST METHOD AND RESULTS

Development charges are levied on residential development as a charge per new unit. Therefore, for the residential forecast, a projection of both the *population growth*² as well as the *population in new housing units*, is required.

Population growth determines the need for additional facilities and provides the foundation for the development-related capital program. When calculating the development charge, however, the development-related net capital costs are spread over the total additional population that occupy new housing units. This *population in new units* represents the population from which development charges will be collected.

Development charges are levied on non-residential development as a charge per square metre of gross floor area (GFA). As with the residential forecast, the non-residential forecast requires both a projection of *employment growth* as well as a projection of the *employment growth associated with new floor space* in the County.

Employment is divided into three land-use based categories:

- **Population-related employment** is employment that primarily serves a resident population and includes retail, education, healthcare, and local government. This generally grows in line with population growth but is also influenced by tourism. Jobs under this category typically locate in land zoned for commercial and institutional uses.
- **Employment-land employment** refers to traditional industrial-type employment primarily accommodated in low-rise industrial buildings in business parks and employment areas. Given the spatial and operational needs of these types of jobs, they are almost exclusively located in lands zoned for industrial employment uses.
- **Rural-based employment** refers to jobs scattered throughout the rural area, primarily related to agricultural, recreational and primary industries. This is a smaller component of the employment base in Peterborough County.

i. Residential Forecast

The residential development forecast incorporates anticipated growth in population and private dwellings (permanent and seasonal) by type. As shown in Table A-6, the County's

² Commonly referred to as "net population growth" in the context of development charges.

total adjusted population (with seasonal) is forecast to grow from approximately 89,200 in 2021 to 96,600 in 2031, with all growth being attributed to permanent residents. Population growth will continue to 2051 when the total adjusted population is forecast to reach 106,900, including 80,200 permanent residents and 26,700 non-permanent population. The permanent population figures identified in the DC Study reflect a census based definition of population which does not include the Census net under-coverage (2.2 per cent of the Census population in Peterborough). The 2051 census population equates to a “total population” of 82,000 which is used for planning purposes and consistent with the County’s ongoing Growth Forecast and Land Needs Assessment study and those forecasts outlined in Schedule 3 of the *Growth Plan for the Greater Golden Horseshoe*.

The number of occupied housing units is forecast to increase from roughly 25,100 in 2021 to 28,100 by 2031 and 34,700 in 2051. This reflects an average annual increase of about 320 units per year through to 2051.

A breakdown of forecast housing by unit type in the County is shown in Tables A-7 and A-8. The mix of new housing generally mirrors recent trends, with the largest share of housing (95 per cent in 2021) being single/semi detached unit types, though a gradual shift to higher density built forms is anticipated over the planning horizon.

Population growth in the new units (as shown in Table A-9) is estimated by applying the following PPUs to the housing unit forecast: 2.71 for single-detached units; 2.30 for rows, and other multiples; and 1.67 for apartments. The assumptions are informed by the historical occupancy patterns set out in Table A-4.

The total forecast population in new housing units, both permanent and seasonal, is: 7,700 over the 2022 to 2031 period; and 24,200 over the 2022 to 2051 period (see Table A-9).

ii. Non-Residential Forecast

Non-residential development charges are calculated on a per unit of gross floor area basis. Therefore, as per the DCA, a forecast of future non-residential building space has been developed. As with the residential forecast, the GFA forecast covers the ten-year period from 2021 to 2031 for the general services and 2021 to 2051 for the Services Related to a Highway. This forecast is shown in Tables A-10 and A-11.

Overall employment (excluding work at home) is forecast to increase by roughly 3,100 over the planning period 2022 to 2031 and by 8,600 between 2022 and 2051. About 17 per cent of all job growth to 2051 will take the form of population-related employment, with nearly 80 per cent as employment land employment, and the remaining growth as rural employment.

An assumed floor space per worker (FSW) is applied to the employment forecasts by category in order to forecast growth in new non-residential space in the County. The FSW assumptions used are 55 square metres per employee for population-related employment, and 110 square metres per employee for employment land employment.

The overall growth in new non-residential building space across the County of Peterborough is approximately: 301,300 square metres between 2022 and 2031; and 826,600 square metres between 2022 and 2051.

APPENDIX A
TABLE A-1

COUNTY OF PETERBOROUGH
HISTORICAL POPULATION, HOUSEHOLD & EMPLOYMENT SUMMARY

Mid-Year	Census Population	Annual Growth	Occupied Households	Annual Growth	HH Size (PPU)	Seasonal Units	Annual Growth	HH Size (PPU)	Total Adj. Population	Annual Growth	Place of Work Employment ⁽¹⁾	Annual Growth	Activity Rate
2011	54,870		21,700		2.53	9,700		3.00	83,970		11,210		
2012	55,052	182	21,855	155	2.52	9,836	136	3.00	84,560	590	11,563	353	21%
2013	55,234	182	22,011	156	2.51	9,974	138	3.00	85,166	596	11,927	364	22%
2014	55,417	183	22,169	158	2.50	10,114	140	3.00	85,759	603	12,303	376	22%
2015	55,601	184	22,329	160	2.49	10,256	142	3.00	86,369	610	12,690	387	23%
2016	55,785	184	22,490	161	2.48	10,400	144	3.00	86,985	616	13,090	400	23%
2017	57,058	1,273	22,986	496	2.48	10,081	-319	3.00	87,301	316	13,095	5	23%
2018	58,360	1,302	23,493	507	2.48	9,772	-309	3.00	87,676	375	13,103	8	22%
2019	59,691	1,331	24,013	520	2.49	9,472	-300	3.00	88,107	431	13,113	10	22%
2020	61,053	1,362	24,544	531	2.49	9,181	-291	3.00	88,596	489	13,126	13	21%
2021	62,445	1,392	25,090	546	2.49	8,900	-281	3.00	89,145	549	13,139	13	21%
Growth 2012-2021		7,575		3,390			-800			5,175		1,929	

Source: Statistics Canada, Census of Canada, Hemson Consulting Ltd. Census Population excludes census undercoverage which is estimated at 2.20%

Note 1: Excludes Work from home

APPENDIX A

TABLE A-2

COUNTY OF PETERBOROUGH
HISTORICAL OCCUPIED HOUSEHOLDS BY UNIT TYPE

Mid-Year	Occupied Households				Shares by Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2011	20,760	150	790	21,700				
2012	20,890	154	811	21,855	96%	1%	4%	100%
2013	21,021	158	832	22,011	96%	1%	4%	100%
2014	21,153	162	854	22,169	95%	1%	4%	100%
2015	21,286	166	877	22,329	95%	1%	4%	100%
2016	21,420	170	900	22,490	95%	1%	4%	100%
2017	21,880	185	921	22,986	95%	1%	4%	100%
2018	22,350	201	942	23,493	95%	1%	4%	100%
2019	22,830	219	964	24,013	95%	1%	4%	100%
2020	23,320	238	986	24,544	95%	1%	4%	100%
2021	23,820	260	1,010	25,090	95%	1%	4%	100%

Source: Statistics Canada, Census of Canada and Canada Mortgage and Housing Corporation (CMHC), Housing Market Information, Hemson Consulting Ltd.

APPENDIX A

TABLE A-3

COUNTY OF PETERBOROUGH
HISTORICAL ANNUAL GROWTH IN OCCUPIED HOUSEHOLDS BY UNIT TYPE

Mid-Year	Annual Growth in Occupied Households				Shares by Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2012	130	4	21	155	84%	3%	14%	100%
2013	131	4	21	156	84%	3%	13%	100%
2014	132	4	22	158	84%	3%	14%	100%
2015	133	4	23	160	83%	3%	14%	100%
2016	134	4	23	161	83%	2%	14%	100%
2017	460	15	21	496	93%	3%	4%	100%
2018	470	16	21	507	93%	3%	4%	100%
2019	480	18	22	520	92%	3%	4%	100%
2020	490	19	22	531	92%	4%	4%	100%
2021	500	22	24	546	92%	4%	4%	100%

Source: Statistics Canada, Census of Canada and Canada Mortgage and Housing Corporation (CMHC), Housing Market Information, Hemson Consulting Ltd.

APPENDIX A
TABLE A-4

COUNTY OF PETERBOROUGH
HISTORICAL HOUSEHOLDS BY PERIOD OF CONSTRUCTION SHOWING HOUSEHOLD SIZE

Period of Construction													
	Pre 1945	1946-1960	1961-1970	1971-1980	1981-1990	1991-1995	1996-2000	2001-2005	2006-2010	2011-2016	Pre 2006	2006-2016	Total
<i>Singles/Semis</i>													
Household Population	9,460	5,520	6,840	9,650	8,845	3,185	2,825	3,205	2,940	2,190	49,530	5,130	54,660
Households	3,750	2,420	2,930	3,955	3,540	1,240	1,040	1,190	1,065	825	20,065	1,890	21,955
Household Size	2.52	2.28	2.33	2.44	2.50	2.57	2.72	2.69	2.76	2.65	2.47	2.71	2.49
<i>Rows</i>													
Household Population	15	20	0	0	30	30	45	30	125	80	170	205	375
Households	5	15	-5	0	25	20	30	15	45	40	105	85	190
Household Size	3.00	1.33	0.00	#DIV/0!	1.20	1.50	1.50	2.00	2.78	2.00	1.62	2.41	1.97
<i>Apartments</i>													
Household Population	380	175	260	220	185	55	85	25	50	65	1,385	115	1,500
Households	220	90	145	145	120	35	55	10	40	40	820	80	900
Household Size	1.73	1.94	1.79	1.52	1.54	1.57	1.55	2.50	1.25	1.63	1.69	1.44	1.67
<i>All Units</i>													
Household Population	9,855	5,715	7,100	9,870	9,060	3,270	2,955	3,260	3,115	2,335	51,085	5,450	56,535
Households	3,975	2,525	3,070	4,100	3,685	1,295	1,125	1,215	1,150	905	20,990	2,055	23,045
Household Size	2.48	2.26	2.31	2.41	2.46	2.53	2.63	2.68	2.71	2.58	2.43	2.65	2.45

Source: Statistics Canada, 2016 National Household Survey Special Run

APPENDIX A
TABLE A-5

COUNTY OF PETERBOROUGH
HISTORICAL PLACE OF WORK EMPLOYMENT

Mid-Year	Total for DC Study	Annual Growth	Work at Home	Annual Growth	Total w/ Work at Home	Annual Growth
2011	11,210		2,830		14,040	
2012	11,563	353	2,832	2	14,395	355
2013	11,927	364	2,834	2	14,761	366
2014	12,303	376	2,836	2	15,139	378
2015	12,690	387	2,838	2	15,528	389
2016	13,090	400	2,840	2	15,930	402
2017	13,095	5	2,842	2	15,937	7
2018	13,103	8	2,844	2	15,947	10
2019	13,113	10	2,846	2	15,959	12
2020	13,126	13	2,848	2	15,974	15
2021	13,139	13	2,851	3	15,990	16
Growth 2012-2021		1,576		19		1,595

Note: Employment Values Include No Fixed Place of Work Employment

Source: Statistics Canada, Census of Canada, Hemson Consulting Ltd.

APPENDIX A
TABLE A-6

COUNTY OF PETERBOROUGH
POPULATION, HOUSEHOLD & EMPLOYMENT FORECAST SUMMARY

Mid-Year	Census Population	Annual Growth	Seasonal Units	Annual Growth	HH Size (PPU)	Total Adj. Pop. w/ Seasonal Units	Annual Growth	Total Occupied Households	Annual Growth	HH Size (PPU)	Place of Work Employment ¹	Annual Growth	Activity Rate
2021	62,445	1,392	8,900	-281	3.00	89,145	549	25,090	546	2.49	13,139	13	21%
2022	63,216	771	8,900	0	3.00	89,916	771	25,375	285	2.49	13,470	331	21%
2023	63,997	781	8,900	0	3.00	90,697	781	25,669	294	2.49	13,824	354	22%
2024	64,788	791	8,900	0	3.00	91,488	791	25,974	305	2.49	14,203	379	22%
2025	65,588	800	8,900	0	3.00	92,288	800	26,290	316	2.49	14,610	407	22%
2026	66,398	810	8,900	0	3.00	93,098	810	26,620	330	2.49	15,047	437	23%
2027	67,093	695	8,900	0	3.00	93,793	695	26,905	285	2.49	15,276	229	23%
2028	67,796	703	8,900	0	3.00	94,496	703	27,196	291	2.49	15,514	238	23%
2029	68,506	710	8,900	0	3.00	95,206	710	27,494	298	2.49	15,759	245	23%
2030	69,223	717	8,900	0	3.00	95,923	717	27,799	305	2.49	16,013	254	23%
2031	69,948	725	8,900	0	3.00	96,648	725	28,110	311	2.49	16,278	265	23%
2032	70,478	530	8,900	0	3.00	97,178	530	28,448	338	2.48	16,518	240	23%
2033	71,012	534	8,900	0	3.00	97,712	534	28,791	343	2.47	16,765	247	24%
2034	71,550	538	8,900	0	3.00	98,250	538	29,141	350	2.46	17,019	254	24%
2035	72,092	542	8,900	0	3.00	98,792	542	29,498	357	2.44	17,281	262	24%
2036	72,638	546	8,900	0	3.00	99,338	546	29,860	362	2.43	17,548	267	24%
2037	73,162	524	8,900	0	3.00	99,862	524	30,199	339	2.42	17,802	254	24%
2038	73,690	528	8,900	0	3.00	100,390	528	30,544	345	2.41	18,063	261	25%
2039	74,222	532	8,900	0	3.00	100,922	532	30,894	350	2.40	18,330	267	25%
2040	74,758	536	8,900	0	3.00	101,458	536	31,249	355	2.39	18,603	273	25%
2041	75,298	540	8,900	0	3.00	101,998	540	31,610	361	2.38	18,884	281	25%
2042	75,791	493	8,900	0	3.00	102,491	493	31,912	302	2.38	19,160	276	25%
2043	76,287	496	8,900	0	3.00	102,987	496	32,218	306	2.37	19,387	227	25%
2044	76,786	499	8,900	0	3.00	103,486	499	32,528	310	2.36	19,571	184	25%
2045	77,289	503	8,900	0	3.00	103,989	503	32,842	314	2.35	19,721	150	26%
2046	77,795	506	8,900	0	3.00	104,495	506	33,160	318	2.35	20,338	617	26%
2047	78,270	475	8,900	0	3.00	104,970	475	33,461	301	2.34	20,602	264	26%
2048	78,748	478	8,900	0	3.00	105,448	478	33,765	304	2.33	20,817	215	26%
2049	79,229	481	8,900	0	3.00	105,929	481	34,073	308	2.33	20,993	176	26%
2050	79,713	484	8,900	0	3.00	106,413	484	34,385	312	2.32	21,135	142	27%
2051	80,198	485	8,900	0	3.00	106,898	485	34,700	315	2.31	21,722	587	27%
Growth 2022-2031		7,503		0			7,503		3,020			3,139	
Growth 2022-2051		17,753		0			17,753		9,610			8,582	

Source: Statistics Canada, Hemson Consulting Ltd. Census Population excludes census undercoverage which is estimated at 2.20%

¹ Excludes Work from Home

APPENDIX A

TABLE A-7

COUNTY OF PETERBOROUGH
FORECAST OF OCCUPIED HOUSEHOLDS BY UNIT TYPE

Mid-Year	Occupied Households				Shares by Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2016	21,420	170	900	22,490	95%	1%	4%	100%
2017	21,880	185	921	22,986	95%	1%	4%	100%
2018	22,350	201	942	23,493	95%	1%	4%	100%
2019	22,830	219	964	24,013	95%	1%	4%	100%
2020	23,320	238	986	24,544	95%	1%	4%	100%
2021	23,820	260	1,010	25,090	95%	1%	4%	100%
2022	24,036	301	1,038	25,375	95%	1%	4%	100%
2023	24,254	348	1,067	25,669	94%	1%	4%	100%
2024	24,474	403	1,097	25,974	94%	2%	4%	100%
2025	24,696	466	1,128	26,290	94%	2%	4%	100%
2026	24,920	540	1,160	26,620	94%	2%	4%	100%
2027	25,132	584	1,189	26,905	93%	2%	4%	100%
2028	25,346	632	1,218	27,196	93%	2%	4%	100%
2029	25,562	684	1,248	27,494	93%	2%	5%	100%
2030	25,780	740	1,279	27,799	93%	3%	5%	100%
2031	26,000	800	1,310	28,110	92%	3%	5%	100%
2032	26,255	838	1,355	28,448	92%	3%	5%	100%
2033	26,512	878	1,401	28,791	92%	3%	5%	100%
2034	26,772	920	1,449	29,141	92%	3%	5%	100%
2035	27,035	964	1,499	29,498	92%	3%	5%	100%
2036	27,300	1,010	1,550	29,860	91%	3%	5%	100%
2037	27,555	1,045	1,599	30,199	91%	3%	5%	100%
2038	27,813	1,082	1,649	30,544	91%	4%	5%	100%
2039	28,073	1,120	1,701	30,894	91%	4%	6%	100%
2040	28,335	1,159	1,755	31,249	91%	4%	6%	100%
2041	28,600	1,200	1,810	31,610	90%	4%	6%	100%
2042	28,817	1,238	1,857	31,912	90%	4%	6%	100%
2043	29,035	1,277	1,906	32,218	90%	4%	6%	100%
2044	29,255	1,317	1,956	32,528	90%	4%	6%	100%
2045	29,477	1,358	2,007	32,842	90%	4%	6%	100%
2046	29,700	1,400	2,060	33,160	90%	4%	6%	100%
2047	29,917	1,438	2,106	33,461	89%	4%	6%	100%
2048	30,135	1,477	2,153	33,765	89%	4%	6%	100%
2049	30,355	1,517	2,201	34,073	89%	4%	6%	100%
2050	30,577	1,558	2,250	34,385	89%	5%	7%	100%
2051	30,800	1,600	2,300	34,700	89%	5%	7%	100%

Source: Statistics Canada, Hemson Consulting Ltd.

Note: Table excludes Seasonal Units - Occupied HHs only

APPENDIX A
TABLE A-8

COUNTY OF PETERBOROUGH
FORECAST OF ANNUAL GROWTH IN OCCUPIED HOUSEHOLDS BY UNIT TYPE

Mid-Year	Occupied Households				Shares by Unit Type			
	Singles/Semis	Rows	Apartments	Total	Singles/Semis	Rows	Apartments	Total
2016	134	4	23	161	83%	2%	14%	100%
2017	460	15	21	496	93%	3%	4%	100%
2018	470	16	21	507	93%	3%	4%	100%
2019	480	18	22	520	92%	3%	4%	100%
2020	490	19	22	531	92%	4%	4%	100%
2021	500	22	24	546	92%	4%	4%	100%
2022	216	41	28	285	76%	14%	10%	100%
2023	218	47	29	294	74%	16%	10%	100%
2024	220	55	30	305	72%	18%	10%	100%
2025	222	63	31	316	70%	20%	10%	100%
2026	224	74	32	330	68%	22%	10%	100%
2027	212	44	29	285	74%	15%	10%	100%
2028	214	48	29	291	74%	16%	10%	100%
2029	216	52	30	298	72%	17%	10%	100%
2030	218	56	31	305	71%	18%	10%	100%
2031	220	60	31	311	71%	19%	10%	100%
2032	255	38	45	338	75%	11%	13%	100%
2033	257	40	46	343	75%	12%	13%	100%
2034	260	42	48	350	74%	12%	14%	100%
2035	263	44	50	357	74%	12%	14%	100%
2036	265	46	51	362	73%	13%	14%	100%
2037	255	35	49	339	75%	10%	14%	100%
2038	258	37	50	345	75%	11%	14%	100%
2039	260	38	52	350	74%	11%	15%	100%
2040	262	39	54	355	74%	11%	15%	100%
2041	265	41	55	361	73%	11%	15%	100%
2042	217	38	47	302	72%	13%	16%	100%
2043	218	39	49	306	71%	13%	16%	100%
2044	220	40	50	310	71%	13%	16%	100%
2045	222	41	51	314	71%	13%	16%	100%
2046	223	42	53	318	70%	13%	17%	100%
2047	217	38	46	301	72%	13%	15%	100%
2048	218	39	47	304	72%	13%	15%	100%
2049	220	40	48	308	71%	13%	16%	100%
2050	222	41	49	312	71%	13%	16%	100%
2051	223	42	50	315	71%	13%	16%	100%
Growth 2022-2031	2,180	540	300	3,020	72%	18%	10%	100%
Growth 2022-2051	6,980	1,340	1,290	9,610	73%	14%	13%	100%

Source: Statistics Canada, Hemson Consulting Ltd.

Note: Table excludes the change in seasonal units

APPENDIX A

TABLE A-9

COUNTY OF PETERBOROUGH
FORECAST POPULATION IN NEW HOUSEHOLDS BY UNIT TYPE

Mid-Year	Forecast Population in New Households				Total for DC Study
	Occupied Households			Seasonl Units	
	Singles/Semis	Rows	Apartments		
2022	585	94	47	0	726
2023	591	108	48	0	747
2024	596	127	50	0	773
2025	602	145	52	0	798
2026	607	170	53	0	831
2027	575	101	48	0	724
2028	580	110	48	0	739
2029	585	120	50	0	755
2030	591	129	52	0	771
2031	596	138	52	0	786
2032	691	87	75	0	854
2033	696	92	77	0	865
2034	705	97	80	0	881
2035	713	101	84	0	897
2036	718	106	85	0	909
2037	691	81	82	0	853
2038	699	85	84	0	868
2039	705	87	87	0	879
2040	710	90	90	0	890
2041	718	94	92	0	904
2042	588	87	78	0	754
2043	591	90	82	0	762
2044	596	92	84	0	772
2045	602	94	85	0	781
2046	604	97	89	0	789
2047	588	87	77	0	752
2048	591	90	78	0	759
2049	596	92	80	0	768
2050	602	94	82	0	778
2051	604	97	84	0	784
Growth 2022-2031	5,908	1,242	501	0	7,651
Growth 2022-2051	18,916	3,082	2,154	0	24,152

Based on PPU's 2.71 2.30 1.67 3.0
Source: Statistics Canada, Hemson Consulting Ltd.

APPENDIX A
TABLE A-10

COUNTY OF PETERBOROUGH
FORECAST OF PLACE OF WORK EMPLOYMENT

Mid-Year	Population Related	Annual Growth	Employment Land	Annual Growth	Rural	Annual Growth	Total for DC Study	Annual Growth	Work at Home	Annual Growth	Total w/ Work at Home	Annual Growth
2016	3,304		3,185		6,601		13,090		2,840		15,930	
2017	3,368	64	3,122	-63	6,605	4	13,095	5	2,842	2	15,937	7
2018	3,434	66	3,060	-62	6,609	4	13,103	8	2,844	2	15,947	10
2019	3,501	67	2,999	-61	6,613	4	13,113	10	2,846	2	15,959	12
2020	3,569	68	2,940	-59	6,617	4	13,126	13	2,848	2	15,974	15
2021	3,638	69	2,882	-58	6,619	2	13,139	13	2,851	3	15,990	16
2022	3,684	46	3,138	256	6,648	29	13,470	331	2,922	71	16,392	402
2023	3,731	47	3,416	278	6,677	29	13,824	354	2,995	73	16,819	427
2024	3,778	47	3,719	303	6,706	29	14,203	379	3,069	74	17,272	453
2025	3,826	48	4,049	330	6,735	29	14,610	407	3,145	76	17,755	483
2026	3,875	49	4,408	359	6,764	29	15,047	437	3,223	78	18,270	515
2027	3,922	47	4,587	179	6,767	3	15,276	229	3,283	60	18,559	289
2028	3,970	48	4,774	187	6,770	3	15,514	238	3,344	61	18,858	299
2029	4,018	48	4,968	194	6,773	3	15,759	245	3,406	62	19,165	307
2030	4,067	49	5,170	202	6,776	3	16,013	254	3,469	63	19,482	317
2031	4,117	50	5,382	212	6,780	4	16,278	265	3,532	63	19,810	328
2032	4,164	47	5,570	188	6,784	4	16,518	240	3,588	56	20,106	296
2033	4,212	48	5,765	195	6,788	4	16,765	247	3,645	57	20,410	304
2034	4,260	48	5,967	202	6,792	4	17,019	254	3,703	58	20,722	312
2035	4,309	49	6,176	209	6,796	4	17,281	262	3,762	59	21,043	321
2036	4,359	50	6,390	214	6,799	3	17,548	267	3,822	60	21,370	327
2037	4,400	41	6,582	192	6,820	21	17,802	254	3,879	57	21,681	311
2038	4,442	42	6,779	197	6,842	22	18,063	261	3,937	58	22,000	319
2039	4,484	42	6,982	203	6,864	22	18,330	267	3,996	59	22,326	326
2040	4,526	42	7,191	209	6,886	22	18,603	273	4,056	60	22,659	333
2041	4,568	42	7,408	217	6,907	21	18,884	281	4,116	60	23,000	341
2042	4,632	64	7,617	209	6,911	4	19,160	276	4,174	58	23,334	334
2043	4,684	52	7,789	172	6,914	3	19,387	227	4,232	58	23,619	285
2044	4,726	42	7,929	140	6,916	2	19,571	184	4,291	59	23,862	243
2045	4,760	34	8,043	114	6,918	2	19,721	150	4,351	60	24,072	210
2046	4,897	137	8,515	472	6,925	7	20,338	617	4,412	61	24,750	678
2047	4,938	41	8,733	218	6,931	6	20,602	264	4,470	58	25,072	322
2048	4,971	33	8,911	178	6,935	4	20,817	215	4,528	58	25,345	273
2049	4,998	27	9,056	145	6,939	4	20,993	176	4,587	59	25,580	235
2050	5,019	21	9,174	118	6,942	3	21,135	142	4,647	60	25,782	202
2051	5,106	87	9,662	488	6,953	11	21,722	587	4,708	61	26,430	648
Growth 2022-2031		479		2,499		160		3,139		681		3,820
Growth 2022-2051		1,468		6,780		334		8,582		1,858		10,440

Source: Statistics Canada, Census of Canada, Hemson Consulting Ltd.

APPENDIX A
TABLE A-11

COUNTY OF PETERBOROUGH
EMPLOYMENT GROWTH IN NEW NON-RESIDENTIAL SPACE BY CATEGORY

Employment Density Assumptions		
Population Related	55	m ² per employee
Employment Land	110	m ² per employee
Rural	0	m ² per employee

Non-Residential Space (in m ²)								
Mid-Year	Population Related Emp. Growth	Growth in New Space (m ²)	Employment Land Emp. Growth	Growth in New Space (m ²)	Rural Emp. Growth	Growth in New Space (m ²)	Total Employment Growth	Growth in New Space (m ²)
2022	46	2,547	256	28,134	29	0	331	30,681
2023	47	2,585	278	30,580	29	0	354	33,165
2024	47	2,585	303	33,330	29	0	379	35,915
2025	48	2,640	330	36,300	29	0	407	38,940
2026	49	2,684	359	39,486	29	0	437	42,170
2027	47	2,596	179	19,694	3	0	229	22,290
2028	48	2,640	187	20,570	3	0	238	23,210
2029	48	2,640	194	21,340	3	0	245	23,980
2030	49	2,695	202	22,220	3	0	254	24,915
2031	50	2,742	212	23,282	4	0	265	26,024
2032	47	2,593	188	20,718	4	0	240	23,311
2033	48	2,640	195	21,450	4	0	247	24,090
2034	48	2,640	202	22,220	4	0	254	24,860
2035	49	2,695	209	22,990	4	0	262	25,685
2036	50	2,729	214	23,576	3	0	267	26,305
2037	41	2,276	192	21,084	21	0	254	23,360
2038	42	2,310	197	21,670	22	0	261	23,980
2039	42	2,310	203	22,330	22	0	267	24,640
2040	42	2,310	209	22,990	22	0	273	25,300
2041	42	2,334	217	23,871	21	0	281	26,205
2042	64	3,496	209	22,989	4	0	276	26,485
2043	52	2,860	172	18,920	3	0	227	21,780
2044	42	2,310	140	15,400	2	0	184	17,710
2045	34	1,870	114	12,540	2	0	150	14,410
2046	137	7,550	472	51,941	7	0	617	59,491
2047	41	2,240	218	23,959	6	0	264	26,199
2048	33	1,815	178	19,580	4	0	215	21,395
2049	27	1,485	145	15,950	4	0	176	17,435
2050	21	1,155	118	12,980	3	0	142	14,135
2051	87	4,792	488	53,721	11	0	587	58,513
Growth 2022-2031		26,354		274,936		0		301,289
Growth 2022-2051		80,764		745,815		0		826,578

Source: Hemson Consulting Ltd.

APPENDIX B

GENERAL SERVICES

TECHNICAL APPENDIX

GENERAL SERVICES – TECHNICAL APPENDIX

This appendix provides the detailed analysis undertaken to establish the development charge rates for each of the eligible general services provided by the County of Peterborough. Five services have been analysed:

Appendix B.1 Emergency Medical Services

Appendix B.2 Long-Term Care

Appendix B.3 Health Unit

Appendix B.4 Waste Diversion

Appendix B.5 Development-Related Studies

Every sub-section, with the exception of Development-Related Studies, contains a set of two tables. The tables provide the background data and analysis undertaken to arrive at the calculated development charge rates for that particular service. An overview of the content and purpose of each of the tables is given below.

Given all County residents have access to all the general services, the benefits of these services are deemed to be County-wide for the purposes of calculating the development charges.

TABLE 1 HISTORICAL SERVICE LEVELS

Table 1 presents the data used to determine the ten-year historical service level. The *DCA* and *Ontario Regulation 82/98* require that development charges be set at a level no higher than the average service level provided in a municipality over the ten-year period immediately preceding the preparation of the background study, on a service by service basis. For the purpose of this study, the historical inventory period is defined as 2012 to 2021.

O. Reg. 82/98 requires that when defining and determining historical service levels, both the quantity and quality of service be taken into consideration. In most cases, the service levels are initially established in quantitative terms. For example, service levels for buildings are presented in terms of square feet. The qualitative aspect is introduced by considering the monetary value of the facility or service. In the case of buildings, for example, the cost would be shown in terms of cost per square foot to replace or construct a facility of the same quality. This approach helps to ensure that the development-related capital facilities

that are to be funded by development reflect not only the quantity (number and size), but also the quality (replacement value or cost) of service provided by the municipality in the past. Both the quantitative and qualitative aspects of service levels used in the current analysis are based on information provided by County staff. The information is generally based on historical records and experience with costs to acquire or construct similar facilities, equipment and infrastructure.

The cost of land used in the inventory of capital assets for each service varies based on the location of the land within the County. The land costs included in this study were based on a survey of different land types throughout the County to determine an average cost per hectare.

Table 1 also shows the calculation of the “maximum allowable” funding envelope. The maximum allowable is defined as the ten-year historical service level (expressed as \$/capita or \$/population and employment) multiplied by the forecast increase in net population or net population and employment over the future planning period. The resulting figure is the value of capital infrastructure that would have to be constructed for that particular service in order to maintain the ten-year historical service level.

There is also a requirement in the *DCA* to consider “excess capacity” within the County’s existing infrastructure that may be available to partially meet future servicing requirements. If Council has expressed its intent before or at the time the capacity was created to recoup the cost of providing the capacity from new development, it is considered “committed excess capacity” under the *DCA*, and the associated capital cost is eligible for recovery. Should uncommitted excess capacity exist, it is determined whether or not this capacity will be available to service new development and, if so, deductions to the maximum allowable funding envelope are required.

Long-Term Care is the one service with only a residential impact where the service level measure of net population has been used. For the services that consider a residential and non-residential charge, the service level measure of net population plus employment has been used.

**TABLE 2 2022 – 2031 DEVELOPMENT-RELATED CAPITAL PROGRAM
AND CALCULATION OF DEVELOPMENT CHARGES**

The *DCA* requires that County Council express its intent to provide capital facilities to support future development. Based on the development forecasts presented in Appendix A, County staff, in collaboration with consultants, have prepared a development-related capital

program that sets out the projects required to service anticipated development for the ten-year period from 2022 to 2031 for general services.

To determine the share of the program that is eligible for recovery through development charges, the project costs are reduced by any anticipated grants, subsidies or other recoveries and “benefit to existing” (BTE) shares.

A benefit to existing share represents that portion of a capital project that will benefit the existing community. It could, for example, represent a portion of a new facility that, at least in part, replaces a facility that is demolished, redeployed or will otherwise not be available to serve its former function (a “replacement” share). The benefit to existing share of the capital program is not deemed to be development-related and is therefore removed from the development charge calculation. The capital cost for benefit to existing shares will require funding from non-development charge sources, typically property taxes or user fees.

The capital program less any benefit to existing shares yields the development-related costs. Although identified as development-related, not all of these costs are necessarily recoverable from development charges in the period from 2022 to 2031. For some services, reserve funds collected from prior growth may be available to fund a share of the program. In addition, a portion of the capital program may service development that occurs beyond 2031 or can be recovered through other development-related funding sources. This portion of the capital program is deemed “other development-related” service capacity which may be eligible for recovery under future DCs.

The remaining portion of the net capital program represents the development-related cost that may be included in the DC calculation. In all cases, this amount is equal to or less than the maximum allowable capital amount as calculated at the end of Table 1. The result is the discounted development-related net capital cost that is eligible for recovery through development charges over the forecast period from 2022 to 2031.

Calculation of the Development Charges Rates

The section below the capital program displays the calculation of the development charge rates. The first step in determining the development charge rate is to allocate the development-related net capital cost between the residential and non-residential sectors. For all general services except Long Term Care, the development-related costs have been apportioned as 71 per cent residential and 29 per cent non-residential. This apportionment is based on the anticipated shares of population growth in new units and employment growth in new space over the ten-year forecast period.

The development-related costs associated with Long Term Care have been allocated 100 per cent to the residential sector, as the need for these services is driven by residential development.

The residential share of the 2022 to 2031 DC eligible cost is then divided by the forecasted population growth in new dwelling units. This gives the residential development charge per capita. The non-residential development-related net capital cost is divided by the forecasted increase in non-residential gross floor area (GFA) net of re-occupation of existing vacant non-residential space. This yields a charge per square metre of new non-residential development.

APPENDIX B.1

EMERGENCY MEDICAL SERVICES

APPENDIX B.1: EMERGENCY MEDICAL SERVICES (EMS)

The Peterborough County/City Paramedics (PCCP) services are administered by the County for the City. The funding allocation between the County and the City is based on the *Consolidated Municipal Service Agreement*, which states that the County is responsible for approximately 41 per cent of the capital costs while the City contributes the remaining 59 per cent. The PCCP operates out of six facilities throughout the County.

TABLE B.1-1 HISTORICAL SERVICE LEVELS

Table B.1-1 displays the ten-year historical inventory for buildings, land, vehicles, and furniture and equipment for Emergency Medical Services in the County of Peterborough. The department operates out of 46,400 square feet of paramedic stations and administration space throughout the County. The space is valued at \$11.2 million, with the County’s portion totalling \$4.6 million. The land associated with all the building space totals 4.2 hectares, which is valued at \$2.4 million (County share is \$995,900). Vehicles operated by the PCCP include 16 ambulances, five Emergency Response Units, a trailer and three passenger vehicles. The 25 vehicles have a combined value of \$3.6 million, with the County’s share totalling \$1.5 million. Finally, the total value of all furniture and equipment, security systems, station equipment, and stretchers adds approximately \$1.7 million to the total value of the inventory. The County’s share of the total furniture and equipment is \$716,200.

The County’s 2021 combined replacement value of the inventory of capital assets for EMS is \$7.8 million, resulting in a ten-year historical average service level of \$75.28 per capita. This historical service level, multiplied by the ten-year net population and employment growth (10,642), results in a ten-year maximum allowable funding envelope of \$801,200.

TABLE B.1-2 2022–2031 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF DEVELOPMENT CHARGES

The Emergency Medical Services 2022 to 2031 development-related capital program includes a provision for 2,500 square feet of new space, additional ambulance vehicles and a mobile command unit, as well as a Land Ambulance Master Plan. The gross cost of the

capital program totals \$1.7 million. Recognizing that the County is responsible for approximately 41 per cent of capital costs acquired, the City’s portion (59 per cent) has been netted off in the grants and subsidies column, leaving a net cost to the County of \$700,200. No BTE share has been identified in the calculation. Additionally, the existing reserve fund balance of \$467,200 has been excluded from the DC calculation.

The remaining \$232,900 is determined to be related to development in the County between 2022 and 2031 and is incorporated into the DC calculation. The cost is allocated 71 per cent (\$165,400) to the residential sector and 29 per cent (\$67,600) to the non-residential sector. When divided by the population growth in new units and increase in non-residential GFA, development charges are calculated at \$21.62 per capita and \$0.22 per square metre.

The following table summarizes the calculation of the Emergency Medical Services development charge:

EMERGENCY MEDICAL SERVICES SUMMARY				
10-year Hist.	2022-2031		Calculated	
Service Level	Development-Related Capital Program		Development Charge	
per pop & emp	Total	Net DC Recoverable	\$/capita	\$/square metre
\$75.28	\$1,692,000	\$232,938	\$21.62	\$0.22

**APPENDIX B.1
TABLE B.1-1**

**COUNTY OF PETERBOROUGH
INVENTORY OF CAPITAL ASSETS
EMERGENCY MEDICAL SERVICES**

BUILDINGS Building Name	# of Square Feet										UNIT COST
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/sq. ft.)
Apsley EMS Base	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	\$ 250
Armour Road EMS	30,800	30,800	30,800	30,800	30,800	30,800	30,800	30,800	30,800	30,800	\$ 240
Buckhorn - PW Building (EMS Share)	740	740	740	740	740	740	740	740	740	740	\$ 275
Clonsilla Base - Leased	-	-	-	-	5,000	5,000	5,000	5,000	5,000	5,000	\$ 240
Lakefield Base - Leased	3,175	3,175	3,175	3,175	3,175	3,175	3,175	3,175	3,175	3,175	\$ 240
Norwood Base - Leased	4,661	4,661	4,661	4,661	4,661	4,661	4,661	4,661	4,661	4,661	\$ 240
Total (sq. ft.)	41,376	41,376	41,376	41,376	46,376	46,376	46,376	46,376	46,376	46,376	
Total (\$000)	\$9,976.1	\$9,976.1	\$9,976.1	\$9,976.1	\$11,176.1	\$11,176.1	\$11,176.1	\$11,176.1	\$11,176.1	\$11,176.1	
County Share (41.4%)	\$4,128.1	\$4,128.1	\$4,128.1	\$4,128.1	\$4,624.7	\$4,624.7	\$4,624.7	\$4,624.7	\$4,624.7	\$4,624.7	

LAND Building Name	# of Hectares										UNIT COST
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/hectare)
Apsley EMS Base	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	\$ 600,000
Armour Road EMS	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	\$ 600,000
Buckhorn - PW Building (EMS Share)	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	\$ 300,000
Clonsilla Base - Leased	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	\$ 600,000
Lakefield Base - Leased	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.61	\$ 600,000
Norwood Base - Leased											
Total (hectares)	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	
Total (\$000)	\$2,406.8	\$2,406.8	\$2,406.8	\$2,406.8	\$2,406.8	\$2,406.8	\$2,406.8	\$2,406.8	\$2,406.8	\$2,406.8	
County Share (41.4%)	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9	

APPENDIX B.1
TABLE B.1-1

COUNTY OF PETERBOROUGH
INVENTORY OF CAPITAL ASSETS
EMERGENCY MEDICAL SERVICES

VEHICLES Vehicle Name	# of Vehicles										UNIT COST
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/vehicle)
Ambulances	15	15	15	14	14	14	14	14	14	15	\$ 185,500
Bariatric Ambulance	0	0	0	1	1	1	1	1	1	1	\$ 250,000
Motorhome	1	1	1	1	1	1	0	0	0	0	\$ 250,000
ERU/ERV	5	5	5	5	5	4	4	4	4	5	\$ 84,000
PCCP Trailer	1	1	1	1	1	1	1	1	1	1	\$ 70,000
Minivan (shared with emergency measures) ⁽¹⁾	0	0	0	0	0	0	0	0.7	0.7	0.7	\$ 50,000
Pick-up Truck (F-250)	0	0	0	0	0	1	1	1	1	1	\$ 50,000
Sedan	0	0	0	0	1	1	1	1	1	1	\$ 35,000
Total (#)	22	22	22	22	23	23	22	23	23	25	
Total (\$000)	\$3,522.5	\$3,522.5	\$3,522.5	\$3,587.0	\$3,622.0	\$3,588.0	\$3,338.0	\$3,373.0	\$3,373.0	\$3,642.5	
County Share (41.4%)	\$1,457.6	\$1,457.6	\$1,457.6	\$1,484.3	\$1,498.8	\$1,484.7	\$1,381.3	\$1,395.7	\$1,395.7	\$1,507.3	

Note 1: only 70% of the cost is attributed to EMS as the remaining use is for Emergency Measures

APPENDIX B.1
TABLE B.1-1

COUNTY OF PETERBOROUGH
INVENTORY OF CAPITAL ASSETS
EMERGENCY MEDICAL SERVICES

FURNITURE & EQUIPMENT Building Name	Total Value of Furniture & Equipment (\$)									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Armour Rd Base - Generator	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000
PAD Program	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 160,000	\$ 80,000	\$ 80,000	\$ 80,000	\$ 80,000
Armour Rd - Security System	\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,000
Armour Rd - Keyway System	\$ 23,900	\$ 23,900	\$ 23,900	\$ 23,900	\$ 23,900	\$ 23,900	\$ 23,900	\$ 23,900	\$ 23,900	\$ 23,900
Armour Rd - Intercom Security	\$ -	\$ 51,500	\$ 51,500	\$ 51,500	\$ 51,500	\$ 51,500	\$ 51,500	\$ 51,500	\$ 51,500	\$ 51,500
Norwood Base - Security System	\$ -	\$ -	\$ 11,850	\$ 11,850	\$ 11,850	\$ 11,850	\$ 11,850	\$ 11,850	\$ 11,850	\$ 11,850
Apsley Base - Security System	\$ -	\$ -	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000	\$ 13,000
Apsley Base - Garage Furnace	\$ 10,800	\$ 10,800	\$ 10,800	\$ 10,800	\$ 10,800	\$ 10,800	\$ 10,800	\$ 10,800	\$ 10,800	\$ 10,800
Apsley Base - Office Furnace	\$ 7,200	\$ 7,200	\$ 7,200	\$ 7,200	\$ 7,200	\$ 7,200	\$ 7,200	\$ 7,200	\$ 7,200	\$ 7,200
Lakefield Base - Security System	\$ -	\$ -	\$ 14,200	\$ 14,200	\$ 14,200	\$ 14,200	\$ 14,200	\$ 14,200	\$ 14,200	\$ 14,200
Clonsilla Base - Generator	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,900	\$ 16,900	\$ 16,900
Toughbook - Supervisor	\$ -	\$ -	\$ 4,580	\$ 4,580	\$ 4,580	\$ 4,580	\$ 4,580	\$ 4,580	\$ 4,580	\$ 4,580
21 Tough Books - Ambulances	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 96,180	\$ 96,180	\$ 96,180	\$ 96,180	\$ 96,180
Simulator ALS Patient, Global Ver 2005 (SIM MAN)	\$ 39,000	\$ 39,000	\$ 39,000	\$ 39,000	\$ 39,000	\$ 39,000	\$ 39,000	\$ 39,000	\$ 39,000	\$ 39,000
RESPI Trainer	\$ 10,100	\$ 10,100	\$ 10,100	\$ 10,100	\$ 10,100	\$ 10,100	\$ 10,100	\$ 10,100	\$ 10,100	\$ 10,100
RESPI Trainer Infant Intubation	\$ 7,700	\$ 7,700	\$ 7,700	\$ 7,700	\$ 7,700	\$ 7,700	\$ 7,700	\$ 7,700	\$ 7,700	\$ 7,700
Respirator Fit	\$ 23,500	\$ 23,500	\$ 23,500	\$ 23,500	\$ 23,500	\$ 23,500	\$ 23,500	\$ 23,500	\$ 23,500	\$ 23,500
Defibrillators and Accessories	\$ 560,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000	\$ 700,000
Bariatric Stretcher	\$ -	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000
Gas Flow Analyzer	\$ -	\$ -	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Nocospraymachine V2	\$ -	\$ -	\$ -	\$ 6,950	\$ 6,950	\$ 6,950	\$ 6,950	\$ 6,950	\$ 6,950	\$ 6,950
CMA Commercial Washer Machine	\$ -	\$ -	\$ -	\$ -	\$ 10,080	\$ 10,080	\$ 10,080	\$ 10,080	\$ 10,080	\$ 10,080
Autopulse System	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,150	\$ 16,150	\$ 16,150	\$ 16,150	\$ 16,150
Birthing Simulator	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,650	\$ 7,650	\$ 7,650	\$ 7,650	\$ 7,650
Power Stretchers (16)	\$ -	\$ -	\$ 117,750	\$ 188,400	\$ 235,500	\$ 259,050	\$ 306,150	\$ 376,800	\$ 376,800	\$ 376,800
Boardroom Audio Visual	\$ -	\$ -	\$ -	\$ -	\$ 16,750	\$ 16,750	\$ 16,750	\$ 16,750	\$ 16,750	\$ 16,750
Regular Stretchers	\$ 100,000	\$ 100,000								
Total (\$000)	\$1,098.2	\$1,309.7	\$1,381.1	\$1,458.7	\$1,532.6	\$1,676.1	\$1,643.2	\$1,730.8	\$1,730.8	\$1,730.8
<i>County Share (41.4%)</i>	<i>\$454.4</i>	<i>\$542.0</i>	<i>\$571.5</i>	<i>\$603.6</i>	<i>\$634.2</i>	<i>\$693.6</i>	<i>\$680.0</i>	<i>\$716.2</i>	<i>\$716.2</i>	<i>\$716.2</i>

**APPENDIX B.1
TABLE B.1-1**

**COUNTY OF PETERBOROUGH
CALCULATION OF SERVICE LEVELS
EMERGENCY MEDICAL SERVICES**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historical Population	84,560	85,156	85,759	86,369	86,985	87,301	87,676	88,107	88,596	89,145
Historical Employment	<u>11,563</u>	<u>11,927</u>	<u>12,303</u>	<u>12,690</u>	<u>13,090</u>	<u>13,095</u>	<u>13,103</u>	<u>13,113</u>	<u>13,126</u>	<u>13,139</u>
Historical Population + Employment	96,123	97,083	98,062	99,059	100,075	100,396	100,779	101,220	101,722	102,284

INVENTORY SUMMARY (\$000)

Buildings	\$4,128.1	\$4,128.1	\$4,128.1	\$4,128.1	\$4,624.7	\$4,624.7	\$4,624.7	\$4,624.7	\$4,624.7	\$4,624.7
Land	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9	\$995.9
Vehicles	\$1,457.6	\$1,457.6	\$1,457.6	\$1,484.3	\$1,498.8	\$1,484.7	\$1,381.3	\$1,395.7	\$1,395.7	\$1,507.3
Furniture & Equipment	\$454.4	\$542.0	\$571.5	\$603.6	\$634.2	\$693.6	\$680.0	\$716.2	\$716.2	\$716.2
Total (\$000)	\$7,036.1	\$7,123.6	\$7,153.2	\$7,212.0	\$7,753.6	\$7,798.9	\$7,681.8	\$7,732.6	\$7,732.6	\$7,844.1

SERVICE LEVEL (\$/pop+empl)

											Average Service Level
Buildings	\$42.95	\$42.52	\$42.10	\$41.67	\$46.21	\$46.06	\$45.89	\$45.69	\$45.46	\$45.21	\$44.38
Land	\$10.36	\$10.26	\$10.16	\$10.05	\$9.95	\$9.92	\$9.88	\$9.84	\$9.79	\$9.74	\$10.00
Vehicles	\$15.16	\$15.01	\$14.86	\$14.98	\$14.98	\$14.79	\$13.71	\$13.79	\$13.72	\$14.74	\$14.57
Furniture & Equipment	\$4.73	\$5.58	\$5.83	\$6.09	\$6.34	\$6.91	\$6.75	\$7.08	\$7.04	\$7.00	\$6.33
Total (\$/pop+empl)	\$73.20	\$73.38	\$72.95	\$72.80	\$77.48	\$77.68	\$76.22	\$76.39	\$76.02	\$76.69	\$75.28

**COUNTY OF PETERBOROUGH
CALCULATION OF MAXIMUM ALLOWABLE
EMERGENCY MEDICAL SERVICES**

10-Year Funding Envelope Calculation	
10-Year Average Service Level 2012-2021	\$75.28
Net Population & Employment Growth 2022-2031	10,642
Net Maximum Allowable Funding Envelope	\$801,155

APPENDIX B.1
TABLE B.1-2

COUNTY OF PETERBOROUGH
DEVELOPMENT-RELATED CAPITAL PROGRAM
EMERGENCY MEDICAL SERVICES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Prior Growth	2022- 2031	Other Dev. Related
1.0 EMERGENCY MEDICAL SERVICES										
1.1 Buildings, Land & Furnishings										
1.1.1 Provision for New Space - (2,500 sq.ft)	2026	\$ 625,000	\$ 366,375	\$ 258,625	0%	\$ -	\$ 258,625	\$ 56,722	\$ 201,903	\$ -
Subtotal		\$ 625,000	\$ 366,375	\$ 258,625		\$ -	\$ 258,625	\$ 56,722	\$ 201,903	\$ -
1.2 Vehicles & Equipment										
1.2.1 Additional Ambulance Vehicle	2023	\$ 185,500	\$ 108,740	\$ 76,760	0%	\$ -	\$ 76,760	\$ 76,760	\$ -	\$ -
1.2.2 Additional Ambulance Vehicle	2023	\$ 185,500	\$ 108,740	\$ 76,760	0%	\$ -	\$ 76,760	\$ 76,760	\$ -	\$ -
1.2.3 Mobile Command Unit	2024	\$ 250,000	\$ 146,550	\$ 103,450	0%	\$ -	\$ 103,450	\$ 103,450	\$ -	\$ -
1.2.4 Additional Ambulance Vehicle	2026	\$ 185,500	\$ 108,740	\$ 76,760	0%	\$ -	\$ 76,760	\$ 76,760	\$ -	\$ -
1.2.5 Additional Ambulance Vehicle	2026	\$ 185,500	\$ 108,740	\$ 76,760	0%	\$ -	\$ 76,760	\$ 76,760	\$ -	\$ -
Subtotal Vehicles & Equipment		\$ 992,000	\$ 581,510	\$ 410,490		\$ -	\$ 410,490	\$ 410,490	\$ -	\$ -
1.3 Development-Related Studies										
1.3.1 Land Ambulance Master Plan	2027	\$ 75,000	\$ 43,965	\$ 31,035	0%	\$ -	\$ 31,035	\$ -	\$ 31,035	\$ -
Subtotal Development-Related Studies		\$ 75,000	\$ 43,965	\$ 31,035		\$ -	\$ 31,035	\$ -	\$ 31,035	\$ -
TOTAL EMERGENCY MEDICAL SERVICES		\$ 1,692,000	\$ 991,850	\$ 700,150		\$ -	\$ 700,150	\$ 467,212	\$ 232,938	\$ -

Note: Other Contributions/recoveries represent the share of costs funded by the City of Peterborough

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	71%	\$165,386
10-Year Population Growth in New Units		7,651
Development Charge Per Capita		\$21.62
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	29%	\$67,552
10-Year Growth in Square Metres		301,289
Development Charge Per Square Metre		\$0.22

2022 - 2031 Net Funding Envelope	\$801,155
Uncommitted Reserve Fund Balance Balance as at December 31, 2021	\$467,212

APPENDIX B.2

LONG-TERM CARE

APPENDIX B.2: LONG-TERM CARE (LTC)

The Fairhaven Long-Term Care Facility is jointly owned and operated by the County of Peterborough and the City of Peterborough. The County’s portion amounts to one-third of the total facility (approximately 33 per cent). The facility provides long-term care services to residents, committed to enhancing the quality of life in a caring and safe environment.

TABLE B.2-1 HISTORICAL SERVICE LEVELS

The County’s LTC services are all operated out of the Fairhaven facility. The building is estimated to be 157,900 square feet with a total value of \$41.8 million. As the County’s portion of the total service is netted down to a third, the County’s portion of the building amounts to \$13.9 million. The facility sits on approximately 5.5 hectares of land valued at \$3.3 million (County portion is \$1.1 million). Lastly, the furniture and equipment in the facility is valued at \$4.5 million, with the County’s portion totalling \$1.5 million.

In total, the County’s LTC capital infrastructure totals \$16.5 million which results in a ten-year historical average service level of \$190.33 per capita. The historical service level, multiplied by the ten-year net population (7,503), results in a ten-year maximum allowable funding envelope of \$1.4 million.

TABLE B.2-2 2022–2031 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF DEVELOPMENT CHARGES

The 2022 to 2031 development-related capital program for Long-Term Care amounts to \$45.0 million and includes an expansion of 128 beds at the Fairhaven facility. The County is responsible for one third of the capital costs, so the remaining two thirds (\$30.0 million) has been removed from the calculation. This leaves the County with a net municipal cost of \$15.0 million.

A benefit to existing share of roughly 78 percent, or \$11.7 million, has been identified. An additional \$980,400 from the existing reserve fund balance has been netted off the DC calculation. A portion of the eligible amount, \$931,800, has been noted as other development-related costs eligible for recovery in subsequent DC Studies as it exceeds the calculated maximum permissible funding envelope of \$1.4 million.

The remaining costs eligible for recovery through development charges over the 2022 to 2031 period totals \$1.4 million. These costs are allocated entirely to the residential sector as Long-Term Care is deemed to benefit future residential development only. The development-related costs are allocated against the ten-year growth in population in new units (7,651), which results in a charge of \$186.66 per capita.

The following table summarizes the calculation of the Long-Term Care development charge:

LONG-TERM CARE SUMMARY				
10-year Hist.	2022-2031		Calculated	
Service Level	Development-Related Capital Program		Development Charge	
per pop & emp	Total	Net DC Recoverable	\$/capita	\$/square metre
\$190.33	\$45,000,000	\$1,428,115	\$186.66	\$0.00

APPENDIX B.2
TABLE B.2-1

COUNTY OF PETERBOROUGH
INVENTORY OF CAPITAL ASSETS
LONG-TERM CARE

BUILDINGS	# of Square Feet										UNIT COST
Building Name	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/sq. ft.)
Fairhaven	157,900	157,900	157,900	157,900	157,900	157,900	157,900	157,900	157,900	157,900	\$ 265
Total (sq. ft.)	157,900	157,900	157,900	157,900	157,900	157,900	157,900	157,900	157,900	157,900	
Total (\$000)	\$41,843.5	\$41,843.5	\$41,843.5	\$41,843.5	\$41,843.5	\$41,843.5	\$41,843.5	\$41,843.5	\$41,843.5	\$41,843.5	
<i>County Share (33.33%)</i>	<i>\$13,947.8</i>	<i>\$13,947.8</i>	<i>\$13,947.8</i>	<i>\$13,947.8</i>	<i>\$13,947.8</i>	<i>\$13,947.8</i>	<i>\$13,947.8</i>	<i>\$13,947.8</i>	<i>\$13,947.8</i>	<i>\$13,947.8</i>	

LAND	# of Hectares										UNIT COST
Building Name	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/hectare)
Fairhaven	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	\$ 600,000
Total (ha)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	
Total (\$000)	\$3,300.0	\$3,300.0	\$3,300.0	\$3,300.0	\$3,300.0	\$3,300.0	\$3,300.0	\$3,300.0	\$3,300.0	\$3,300.0	
<i>County Share (33.33%)</i>	<i>\$1,100.0</i>	<i>\$1,100.0</i>	<i>\$1,100.0</i>	<i>\$1,100.0</i>	<i>\$1,100.0</i>	<i>\$1,100.0</i>	<i>\$1,100.0</i>	<i>\$1,100.0</i>	<i>\$1,100.0</i>	<i>\$1,100.0</i>	

FURNITURE & EQUIPMENT	Total Value of Furniture & Equipment (\$)									
Building Name	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Equipment	\$ 4,500,000	\$ 4,500,000	\$ 4,500,000	\$ 4,500,000	\$ 4,500,000	\$ 4,500,000	\$ 4,500,000	\$ 4,500,000	\$ 4,500,000	\$ 4,500,000
Total (\$000)	\$4,500.0	\$4,500.0	\$4,500.0	\$4,500.0	\$4,500.0	\$4,500.0	\$4,500.0	\$4,500.0	\$4,500.0	\$4,500.0
<i>County Share (33.33%)</i>	<i>\$1,500.0</i>	<i>\$1,500.0</i>	<i>\$1,500.0</i>	<i>\$1,500.0</i>	<i>\$1,500.0</i>	<i>\$1,500.0</i>	<i>\$1,500.0</i>	<i>\$1,500.0</i>	<i>\$1,500.0</i>	<i>\$1,500.0</i>

**APPENDIX B.2
TABLE B.2-1**

**COUNTY OF PETERBOROUGH
CALCULATION OF SERVICE LEVELS
LONG-TERM CARE**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historical Population	84,560	85,156	85,759	86,369	86,985	87,301	87,676	88,107	88,596	89,145

INVENTORY SUMMARY (\$000)

Buildings	\$13,947.8	\$13,947.8	\$13,947.8	\$13,947.8	\$13,947.8	\$13,947.8	\$13,947.8	\$13,947.8	\$13,947.8	\$13,947.8
Land	\$1,100.0	\$1,100.0	\$1,100.0	\$1,100.0	\$1,100.0	\$1,100.0	\$1,100.0	\$1,100.0	\$1,100.0	\$1,100.0
Furniture & Equipment	\$1,500.0	\$1,500.0	\$1,500.0	\$1,500.0	\$1,500.0	\$1,500.0	\$1,500.0	\$1,500.0	\$1,500.0	\$1,500.0
Total (\$000)	\$16,547.8	\$16,547.8	\$16,547.8	\$16,547.8	\$16,547.8	\$16,547.8	\$16,547.8	\$16,547.8	\$16,547.8	\$16,547.8

SERVICE LEVEL (\$/pop+empl)											Average Service Level
Buildings	\$164.95	\$163.79	\$162.64	\$161.49	\$160.35	\$159.77	\$159.08	\$158.31	\$157.43	\$156.46	\$160.43
Land	\$13.01	\$12.92	\$12.83	\$12.74	\$12.65	\$12.60	\$12.55	\$12.48	\$12.42	\$12.34	\$12.65
Furniture & Equipment	\$17.74	\$17.61	\$17.49	\$17.37	\$17.24	\$17.18	\$17.11	\$17.02	\$16.93	\$16.83	\$17.25
Total (\$/capita)	\$195.69	\$194.32	\$192.96	\$191.59	\$190.24	\$189.55	\$188.74	\$187.82	\$186.78	\$185.63	\$190.33

**COUNTY OF PETERBOROUGH
CALCULATION OF MAXIMUM ALLOWABLE
LONG-TERM CARE**

10-Year Funding Envelope Calculation	
10-Year Average Service Level 2012-2021	\$190.33
Net Population Growth 2022-2031	7,503
Net Maximum Allowable Funding Envelope	\$1,428,115

APPENDIX B.2
TABLE B.2-2

COUNTY OF PETERBOROUGH
DEVELOPMENT-RELATED CAPITAL PROGRAM
LONG-TERM CARE

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Prior Growth	2022- 2031	Other Dev. Related
2.0 LONG-TERM CARE										
2.1 Buildings, Land & Furnishings										
2.1.1 Fairhaven Expansion (128 Beds)	2030	\$ 45,000,000	\$ 30,000,000	\$ 15,000,000	78%	\$ 11,659,720	\$ 3,340,280	\$ 980,371	\$ 1,428,115	\$ 931,795
Subtotal Buildings, Land & Furnishings		\$ 45,000,000	\$ 30,000,000	\$ 15,000,000		\$ 11,659,720	\$ 3,340,280	\$ 980,371	\$ 1,428,115	\$ 931,795
TOTAL LONG-TERM CARE		\$ 45,000,000	\$ 30,000,000	\$ 15,000,000		\$ 11,659,720	\$ 3,340,280	\$ 980,371	\$ 1,428,115	\$ 931,795

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	100%	\$1,428,115
10-Year Population Growth in New Units		7,651
Development Charge Per Capita		\$186.66
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	0%	\$0
10-Year Growth in Square Metres		301,289
Development Charge Per Square Metre		\$0.00

2022 - 2031 Net Funding Envelope	\$1,428,115
Uncommitted Reserve Fund Balance Balance as at December 31, 2021	\$980,371

APPENDIX B.3

HEALTH UNIT

APPENDIX B.3: HEALTH UNIT

The Peterborough County City Health Unit (PCCHU) services residents within the City and throughout the County of Peterborough as well as Curve Lake and Hiawatha First nations. Previously, services were run out of 10 Hospital Drive but have since been moved to the new King Street location.

TABLE B.3-1 HISTORICAL SERVICE LEVELS

Health Unit services are provided through the County’s main building on King Street. The total building space associated with the Health Unit amounts to 45,000 square feet and is valued at \$11.9 million. The County’s portion is roughly 42 per cent and totals \$4.8 million. The facility space occupies 0.4 hectares of land, which is worth approximately \$222,000 (with the County portion at \$90,300). The Health Unit uses one vehicle, the Mobile Dental Unit, that is valued at \$500,000 (with the County portion totalling \$203,400). Lastly, the total value of pooled equipment used at the facility amounts to \$450,000 (County portion is \$183,000).

The combined 2021 value of the County’s inventory of capital assets for the Health Unit is \$5.3 million which yields a historical average service level of \$42.30 per population and employment. The historical service level, multiplied by the ten-year net population and employment growth (10,642) results in a ten-year maximum allowable funding envelope of \$450,200.

TABLE B.3-2 2022–2031 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF DEVELOPMENT CHARGES

The 2022 to 2031 development-related capital program includes one project, a provision for new Health Unit space (expected to be about one third of the existing space) with an estimated cost of \$4.0 million. The County will be responsible for a small portion of the total capital costs, with \$3.5 million removed in the grants and subsidies column as it relates to the costs covered by other entities (such as the City). The County’s total net municipal cost is \$485,000. No benefit to existing or other development-related shares have been identified. Existing reserve funds of \$232,100 have been removed from the development charge calculation.

The remaining \$252,900 is determined to be related to development in the County between 2022 and 2031 and is incorporated into the DC calculation. The cost is allocated 71 per cent (\$179,500) to the residential sector and 29 per cent (\$73,300) to the non-residential sector. When divided by the population growth in new units and increase in non-residential GFA, development charges are calculated at \$23.47 per capita and \$0.24 per square metre.

The following table summarizes the calculation of the Health Unit development charge:

HEALTH UNIT SUMMARY				
10-year Hist.	2022-2031		Calculated	
Service Level	Development-Related Capital Program		Development Charge	
per pop & emp	Total	Net DC Recoverable	\$/capita	\$/square metre
\$42.30	\$3,975,000	\$252,869	\$23.47	\$0.24

**APPENDIX B.3
TABLE B.3-1**

**COUNTY OF PETERBOROUGH
INVENTORY OF CAPITAL ASSETS
HEALTH UNIT**

BUILDINGS	# of Square Feet										UNIT COST
Building Name	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/sq. ft.)
185 King Street	-	-	-	45,000	45,000	45,000	45,000	45,000	45,000	45,000	\$ 265
10 Hospital Drive	15,000	15,000	15,000	-	-	-	-	-	-	-	\$ 265
Total (sq. ft.)	15,000	15,000	15,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	
Total (\$000)	\$3,975.0	\$3,975.0	\$3,975.0	\$11,925.0	\$11,925.0	\$11,925.0	\$11,925.0	\$11,925.0	\$11,925.0	\$11,925.0	
County Share (41.8%)	\$1,616.6	\$1,616.6	\$1,616.6	\$4,849.9	\$4,849.9	\$4,849.9	\$4,849.9	\$4,849.9	\$4,849.9	\$4,849.9	

LAND	# of Hectares										UNIT COST
Building Name	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/hectare)
185 King Street	0	0	0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	\$ 600,000
10 Hospital Drive	0.7	0.7	0.7	0	0	0	0	0	0	0	\$ 600,000
Total (ha)	0.7	0.7	0.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	
Total (\$000)	\$420.0	\$420.0	\$420.0	\$222.0	\$222.0	\$222.0	\$222.0	\$222.0	\$222.0	\$222.0	
County Share (41.8%)	\$170.8	\$170.8	\$170.8	\$90.3	\$90.3	\$90.3	\$90.3	\$90.3	\$90.3	\$90.3	

VEHICLES	# of Vehicles										UNIT COST
Vehicle Name	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/vehicle)
Mobile Dental Unit	0	0	0	0	0	1	1	1	1	1	\$ 500,000
Total (#)	-	-	-	-	-	1	1	1	1	1	
Total (\$000)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$500.0	\$500.0	\$500.0	\$500.0	\$500.0	
County Share (41.8%)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$203.4	\$203.4	\$203.4	\$203.4	\$203.4	

FURNITURE & EQUIPMENT	Total Value of Furniture & Equipment (\$)									
Building Name	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Equipment Pooled	\$ 150,000	\$ 150,000	\$ 150,000	\$ 450,000	\$ 450,000	\$ 450,000	\$ 450,000	\$ 450,000	\$ 450,000	\$ 450,000
Total (\$000)	\$150.0	\$150.0	\$150.0	\$450.0	\$450.0	\$450.0	\$450.0	\$450.0	\$450.0	\$450.0
County Share (41.8%)	\$61.0	\$61.0	\$61.0	\$183.0	\$183.0	\$183.0	\$183.0	\$183.0	\$183.0	\$183.0

**APPENDIX B.3
TABLE B.3-1**

**COUNTY OF PETERBOROUGH
CALCULATION OF SERVICE LEVELS
HEALTH UNIT**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historical Population	84,560	85,156	85,759	86,369	86,985	87,301	87,676	88,107	88,596	89,145
Historical Employment	<u>11,563</u>	<u>11,927</u>	<u>12,303</u>	<u>12,690</u>	<u>13,090</u>	<u>13,095</u>	<u>13,103</u>	<u>13,113</u>	<u>13,126</u>	<u>13,139</u>
Historical Population + Employment	96,123	97,083	98,062	99,059	100,075	100,396	100,779	101,220	101,722	102,284

INVENTORY SUMMARY (\$000)

Buildings	\$1,616.6	\$1,616.6	\$1,616.6	\$4,849.9	\$4,849.9	\$4,849.9	\$4,849.9	\$4,849.9	\$4,849.9	\$4,849.9
Land	\$170.8	\$170.8	\$170.8	\$90.3	\$90.3	\$90.3	\$90.3	\$90.3	\$90.3	\$90.3
Vehicles	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$203.4	\$203.4	\$203.4	\$203.4	\$203.4
Furniture & Equipment	\$61.0	\$61.0	\$61.0	\$183.0	\$183.0	\$183.0	\$183.0	\$183.0	\$183.0	\$183.0
Total (\$000)	\$1,848.5	\$1,848.5	\$1,848.5	\$5,123.2	\$5,123.2	\$5,326.5	\$5,326.5	\$5,326.5	\$5,326.5	\$5,326.5

SERVICE LEVEL (\$/pop+empl)											Average Service Level
Buildings	\$16.82	\$16.65	\$16.49	\$48.96	\$48.46	\$48.31	\$48.12	\$47.91	\$47.68	\$47.42	\$38.68
Land	\$1.78	\$1.76	\$1.74	\$0.91	\$0.90	\$0.90	\$0.90	\$0.89	\$0.89	\$0.88	\$1.15
Vehicles	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2.03	\$2.02	\$2.01	\$2.00	\$1.99	\$1.00
Furniture & Equipment	\$0.63	\$0.63	\$0.62	\$1.85	\$1.83	\$1.82	\$1.82	\$1.81	\$1.80	\$1.79	\$1.46
Total (\$/pop+empl)	\$19.23	\$19.04	\$18.85	\$51.72	\$51.19	\$53.06	\$52.85	\$52.62	\$52.36	\$52.08	\$42.30

**COUNTY OF PETERBOROUGH
CALCULATION OF MAXIMUM ALLOWABLE
HEALTH UNIT**

10-Year Funding Envelope Calculation	
10-Year Average Service Level 2012-2021	\$42.30
Net Population & Employment Growth 2022-2031	10,642
Net Maximum Allowable Funding Envelope	\$450,171

APPENDIX B.3
TABLE B.3-2

COUNTY OF PETERBOROUGH
DEVELOPMENT-RELATED CAPITAL PROGRAM
HEALTH UNIT

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Prior Growth	2022- 2031	Other Dev. Related
3.0 HEALTH UNIT										
3.1 Buildings, Land & Furnishings										
3.1.1 Provision for New Space (1/3 of existing space)	2028	\$ 3,975,000	\$ 3,490,010	\$ 484,990	0%	\$ -	\$ 484,990	\$ 232,121	\$ 252,869	\$ -
Subtotal Buildings, Land & Furnishings		\$ 3,975,000	\$ 3,490,010	\$ 484,990		\$ -	\$ 484,990	\$ 232,121	\$ 252,869	\$ -
TOTAL HEALTH UNIT		\$ 3,975,000	\$ 3,490,010	\$ 484,990		\$ -	\$ 484,990	\$ 232,121	\$ 252,869	\$ -

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	71%	\$179,537
10-Year Population Growth in New Units		7,651
Development Charge Per Capita		\$23.47
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	29%	\$73,332
10-Year Growth in Square Metres		301,289
Development Charge Per Square Metre		\$0.24

2022 - 2031 Net Funding Envelope	\$450,171
Uncommitted Reserve Fund Balance	
Balance as at December 31, 2021	\$232,121

APPENDIX B.4

WASTE DIVERSION

APPENDIX B.4: WASTE DIVERSION

The County of Peterborough’s provides Waste Diversion services to it’s residents. While the County does not own any buildings or land associated with Waste Diversion services, they do employ various vehicles, furniture and equipment to meet service delivery standards.

TABLE B.4-1 HISTORICAL SERVICE LEVELS

The County has three pick up trucks used to administer waste diversion services, with a total value of \$123,000. Furniture and equipment, including a solar powered compactor, Molok containers, sea cans and front-end recycling bins add another \$635,800 to the total value of capital assets.

The total value of the inventory of capital assets for the County’s Waste Diversion services in 2021 was \$758,800, resulting in a ten-year historical average service level of \$7.62 per population and employment. The historical service level, multiplied by the ten-year net population and employment growth (10,642), results in a ten-year maximum allowable funding envelope of \$81,100.

TABLE B.4-2 2022 – 2031 DEVELOPMENT-RELATED CAPITAL PROGRAM & CALCULATION OF DEVELOPMENT CHARGES

The Waste Diversion capital program amounts to \$535,000. This includes a 24/7 Hazardous Waste Site and additional development-related works. No grants or subsidies have been identified. Additionally, these works are deemed to be entirely development-related and no benefit to existing share is included in the calculation.

A small amount collected in the existing reserve funds totalling \$1,300 has been removed from the calculation. The net funding envelope of \$81,100 limits the amount that can be collected as part of this by-law. A portion of \$452,600 has been identified as other development-related shares to be recovered under future studies.

The remaining \$81,100 is determined to be related to development in the County between 2022 and 2031 and is incorporated into the DC calculation. The cost is allocated 71 per cent (\$57,600) to the residential sector and 29 per cent (\$23,500) to the non-residential sector.

When divided by the population growth in new units and increase in non-residential GFA, development charges are calculated at \$7.53 per capita and \$0.08 per square metre.

The following table summarizes the calculation of the Waste Diversion development charge:

WASTE DIVERSION SUMMARY				
10-year Hist.	2022-2031		Calculated	
Service Level	Development-Related Capital Program		Development Charge	
per pop & emp	Total	Net DC Recoverable	\$/capita	\$/square metre
\$7.62	\$535,000	\$81,095	\$7.53	\$0.08

APPENDIX B.4
TABLE B.4-1

COUNTY OF PETERBOROUGH
INVENTORY OF CAPITAL ASSETS
WASTE DIVERSION

VEHICLES Vehicle Name	# of Vehicles										UNIT COST (\$/vehicle)
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
Pick Up Trucks	3	3	3	3	3	3	3	3	3	3	\$ 41,000
Total (#)	3	3	3	3	3	3	3	3	3	3	
Total (\$000)	\$123.0	\$123.0	\$123.0	\$123.0	\$123.0	\$123.0	\$123.0	\$123.0	\$123.0	\$123.0	

FURNITURE & EQUIPMENT Building Name	Total Value of Furniture & Equipment (\$)									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Solar Powered Compactor	\$ 114,200	\$ 114,200	\$ 114,200	\$ 114,200	\$ 114,200	\$ 114,200	\$ 114,200	\$ 114,200	\$ 114,200	\$ 114,200
Molok (19)	\$ 95,000	\$ 95,000	\$ 95,000	\$ 95,000	\$ 95,000	\$ 95,000	\$ 95,000	\$ 95,000	\$ 95,000	\$ 95,000
Sea Cans	\$ 36,000	\$ 36,000	\$ 36,000	\$ 36,000	\$ 36,000	\$ 36,000	\$ 36,000	\$ 36,000	\$ 36,000	\$ 36,000
Front-end Recycling Bins	\$ 390,600	\$ 390,600	\$ 390,600	\$ 390,600	\$ 390,600	\$ 390,600	\$ 390,600	\$ 390,600	\$ 390,600	\$ 390,600
Total (\$000)	\$635.8	\$635.8	\$635.8	\$635.8	\$635.8	\$635.8	\$635.8	\$635.8	\$635.8	\$635.8

**APPENDIX B.4
TABLE B.4-1**

**COUNTY OF PETERBOROUGH
CALCULATION OF SERVICE LEVELS
WASTE DIVERSION**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historical Population	84,560	85,156	85,759	86,369	86,985	87,301	87,676	88,107	88,596	89,145
Historical Employment	11,563	11,927	12,303	12,690	13,090	13,095	13,103	13,113	13,126	13,139
Historical Population + Employment	96,123	97,083	98,062	99,059	100,075	100,396	100,779	101,220	101,722	102,284

INVENTORY SUMMARY (\$000)

Vehicles	\$123.0	\$123.0	\$123.0	\$123.0	\$123.0	\$123.0	\$123.0	\$123.0	\$123.0	\$123.0
Furniture & Equipment	\$635.8	\$635.8	\$635.8	\$635.8	\$635.8	\$635.8	\$635.8	\$635.8	\$635.8	\$635.8
Total (\$000)	\$758.8	\$758.8	\$758.8	\$758.8	\$758.8	\$758.8	\$758.8	\$758.8	\$758.8	\$758.8

SERVICE LEVEL (\$/pop+empl)											Average Service Level
Vehicles	\$1.28	\$1.27	\$1.25	\$1.24	\$1.23	\$1.23	\$1.22	\$1.22	\$1.21	\$1.20	\$1.23
Furniture & Equipment	\$6.61	\$6.55	\$6.48	\$6.42	\$6.35	\$6.33	\$6.31	\$6.28	\$6.25	\$6.22	\$6.38
Total (\$/pop+empl)	\$7.89	\$7.82	\$7.74	\$7.66	\$7.58	\$7.56	\$7.53	\$7.50	\$7.46	\$7.42	\$7.62

**COUNTY OF PETERBOROUGH
CALCULATION OF MAXIMUM ALLOWABLE
WASTE DIVERSION**

10-Year Funding Envelope Calculation	
10-Year Average Service Level 2012-2021	\$7.62
Net Population & Employment Growth 2022-2031	10,642
Net Maximum Allowable Funding Envelope	\$81,095

APPENDIX B.4
TABLE B.4-2

COUNTY OF PETERBOROUGH
DEVELOPMENT-RELATED CAPITAL PROGRAM
WASTE DIVERSION

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Prior Growth	2022- 2031	Other Dev. Related
4.0 WASTE DIVERSION										
4.1 Buildings, Land & Furnishings										
4.1.1 24/7 Hazardous Waste Site (Trailer, coverall, hydro/water, etc.)	2026	\$ 165,000	\$ -	\$ 165,000	0%	\$ -	\$ 165,000	\$ 1,268	\$ 81,095	\$ 82,637
Subtotal Buildings, Land & Furnishings		\$ 165,000	\$ -	\$ 165,000		\$ -	\$ 165,000	\$ 1,268	\$ 81,095	\$ 82,637
4.2 Curb Side Organic Expansion										
4.2.1 Additional Development-Related Works	2027	\$ 370,000	\$ -	\$ 370,000	0%	\$ -	\$ 370,000	\$ -	\$ -	\$ 370,000
Subtotal Curb Side Organic Expansion		\$ 370,000	\$ -	\$ 370,000		\$ -	\$ 370,000	\$ -	\$ -	\$ 370,000
TOTAL WASTE DIVERSION		\$ 535,000	\$ -	\$ 535,000		\$ -	\$ 535,000	\$ 1,268	\$ 81,095	\$ 452,637

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	71%	\$57,577
10-Year Population Growth in New Units		7,651
Development Charge Per Capita		\$7.53
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	29%	\$23,517
10-Year Growth in Square Metres		301,289
Development Charge Per Square Metre		\$0.08

2022 - 2031 Net Funding Envelope	\$81,095
Uncommitted Reserve Fund Balance Balance as at December 31, 2021	\$1,268

APPENDIX B.5

DEVELOPMENT- RELATED STUDIES

APPENDIX B.5: DEVELOPMENT-RELATED STUDIES

The DCA allows the cost of development-related studies to be included in the calculation of development charges. Subsection 7 (3) of the DCA allows for a development-related studies class in respect of any service in subsection 2 (4). This appendix covers the costs included for recovery of development-related studies.

TABLE B.5-1 2022 – 2031 DEVELOPMENT-RELATED CAPITAL PROGRAM AND CALCULATION OF DEVELOPMENT CHARGES

As shown in Table B.5-1, the 2022 to 2031 development-related gross cost for development-related studies is \$1.4 million. The capital program includes two Development Charge Studies, Regional Employment Strategy, Shoreline/Watershed Planning Study, Growth Management Study, Official Plan Review and a provision for other development-related studies.

As the majority elements of these studies are related to development in the County of Peterborough, only a few benefit to existing shares have been deducted to account for the portion of certain studies that will review the state of the existing infrastructure and make recommendations for its improvement. The BTE share removed from the calculation totals \$65,000. Additionally, \$30,600 from the existing reserve fund balance has been netted off from the development-related costs to yield an in-period DC eligible capital cost of \$1.3 million.

This amount is apportioned 71 per cent (\$911,900) to residential development and 29 per cent (\$372,500) to non-residential development. The resulting charges for Development-Related Studies are \$119.19 per capita and \$1.24 per square metre non-residential development.

The following table summarizes the calculation of the Development-Related studies development charge:

DEVELOPMENT-RELATED STUDIES SUMMARY

2022-2031

Calculated

Development-Related Capital Program

Development Charge

Total	Net DC Recoverable	\$/capita	\$/square metre
\$1,380,000	\$1,284,393	\$119.19	\$1.24

APPENDIX B.5
TABLE B.5-1

COUNTY OF PETERBOROUGH
DEVELOPMENT-RELATED CAPITAL PROGRAM
DEVELOPMENT-RELATED STUDIES

Project Description	Timing	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs		Total DC Eligible Costs	DC Eligible Costs		
					Replacement & BTE Shares	Replacement & BTE Shares		Prior Growth	2022- 2031	Other Dev. Related
5.0 DEVELOPMENT-RELATED STUDIES										
5.1 Development-Related Studies										
5.1.1 Development Charges Study	2022	\$ 50,000	\$ -	\$ 50,000	0%	\$ -	\$ 50,000	\$ 30,607	\$ 19,393	\$ -
5.1.2 Regional Employment Strategy	2023	\$ 30,000	\$ -	\$ 30,000	50%	\$ 15,000	\$ 15,000	\$ -	\$ 15,000	\$ -
5.1.3 Shoreline/Watershed Planning Study	2023	\$ 1,000,000	\$ -	\$ 1,000,000	0%	\$ -	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -
5.1.4 Development Charges Study	2027	\$ 50,000	\$ -	\$ 50,000	0%	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -
5.1.6 Growth Management Study	2028	\$ 50,000	\$ -	\$ 50,000	0%	\$ -	\$ 50,000	\$ -	\$ 50,000	\$ -
5.1.7 Official Plan Review	2029	\$ 100,000	\$ -	\$ 100,000	50%	\$ 50,000	\$ 50,000	\$ -	\$ 50,000	\$ -
5.1.8 Other Development-Related Studies	Various	\$ 100,000	\$ -	\$ 100,000	0%	\$ -	\$ 100,000	\$ -	\$ 100,000	\$ -
Subtotal Development-Related Studies		\$ 1,380,000	\$ -	\$ 1,380,000		\$ 65,000	\$ 1,315,000	\$ 30,607	\$ 1,284,393	\$ -
TOTAL DEVELOPMENT-RELATED STUDIES		\$ 1,380,000	\$ -	\$ 1,380,000		\$ 65,000	\$ 1,315,000	\$ 30,607	\$ 1,284,393	\$ -

Residential Development Charge Calculation		
Residential Share of 2022 - 2031 DC Eligible Costs	71%	\$911,919
10-Year Population Growth in New Units		7,651
Development Charge Per Capita		\$119.19
Non-Residential Development Charge Calculation		
Non-Residential Share of 2022 - 2031 DC Eligible Costs	29%	\$372,474
10-Year Growth in Square Metres		301,289
Development Charge Per Square Metre		\$1.24

Uncommitted Reserve Fund Balance	
Balance as at December 31, 2021	\$30,607

APPENDIX C

SERVICES RELATED TO A HIGHWAY

TECHNICAL APPENDIX

INTRODUCTION

The Transportation Department is responsible for Services Related to a Highway which includes Public Works and Road Works.

A 30-year development forecast, from 2022 to 2051, has been used to calculate the development charges for all Services Related to a Highway. Given all County residents have access to the Services Related to a Highway, the benefits of these services are deemed to be County-wide for the purposes of calculating the development charges.

Details on the development forecasts and development charge methodology for the Services Related to a Highway are set out in Appendix A and the introduction to Appendix B respectively. The tables in this Appendix C provide the background data and analysis undertaken to arrive at the calculated development charge rates for Services Related to a Highway.

The cost, quantum and description of the projects included in the roads and related capital forecast have been developed by Paradigm Transportation Solutions Limited in consultation with County staff as part of the ongoing Transportation Master Plan (TMP). The technical memorandums which have been prepared and shared with County Staff and the TMP Steering Committee can provide further details on the technical modelling to support the works identified herein.

Paradigm Transportation Solutions Limited: TMP Technical Memorandum

Since the preparation of these memorandums, County Council proposed a series of changes to the capital project list to be incorporated into this DC Study at the March 2nd 2022 and April 6th 2022 meetings. This includes:

- The removal of County Road 18 (Ward Street) – South Limit of Bridgenorth to County Road 14 (Bridge Road)
- The removal of County Road 14 (Yankee Line/Bridge Road) – County Road 16 (Robinson Road) to County Road 18 (Ward Street)
- Updated costs for CR 18 (Ward Street) - South Limit of Bridgenorth to CR 14 (Bridge Road)
- The addition of County Road 10 – County Road 21 (King Street) to Fallis Line (Millbrook)
- The addition of County Road 28 – From Highway 7 - 115 to Fraserville

The forecasts used to help inform the TMP model and development of the capital program are consistent with the County's overall Growth Forecast and Land Needs Assessment Study approved for use in this DC Study. The long-term forecast also aligns with the County forecast outlined in Schedule 3 of the *Growth Plan for the Greater Golden Horseshoe*.

APPENDIX C: SERVICES RELATED TO A HIGHWAY

The Transportation Department oversees the design, development, and construction of all County roads and related infrastructure in the County of Peterborough. The Department also provides review and inspection services to facilitate new development and to maintain service standards to sustain existing infrastructure. This appendix summarizes the development charge calculations for the County road network and related infrastructure.

The development-related Services Related to a Highway infrastructure projects are required to service the needs of new development in the County over a 30 year planning horizon, from 2022 to 2051, during which time 24,200 additional persons in new dwelling units and 826,600 additional square meters of non-residential building space are forecast in Peterborough. The development forecast is discussed in more detail in Appendix A.

The following tables set out the 2022 to 2051 development-related capital forecast and the development charge calculations. The cost, quantum and description of the projects included in the forecast have been developed by Paradigm Transportation Solutions Limited in consultation with County staff as part of the ongoing Transportation Master Plan (TMP).

Tables C-1 and C-2 provide details of the projects included in the development charges calculation. The content of the tables are as follows:

Table C-1	Services Related to a Highway Historical Service Levels 2012 – 2021
Table C-2	Services Related to a Highway Capital Program 2022 – 2051 and Calculated Development Charges

TABLE C-1 HISTORICAL SERVICE LEVELS

Table C-1 displays the ten-year historical inventory for Services Related to a Highway infrastructure.

The County has a total of 23 buildings associated with Services Related to a Highway that total 93,300 square feet. The replacement value of these buildings is estimated at \$9.3 million. The associated land for these buildings amounts to 39 hectares with a replacement value of \$11.6 million.

The replacement value of the current 710 kilometre County road network, net of land costs, is estimated at \$744.8 million. The network includes Class A, B and C roads throughout the

County. The County currently has 127 bridges, 26 culverts and 1,400 cross culverts with a total replacement value of \$234.1 million.

Lastly, the vehicles, furniture and equipment that are utilized by Public Works and Transportation (Services Related to a Highway) totals \$11.9 million. The 89 vehicles represent \$11.8 million of the total, with the remaining \$158,900 related to furniture and equipment.

The resulting ten-year historical average service level of \$10,089.88 per capita and employment is multiplied by the long-term net population and employment growth (26,335) and results in a maximum allowable funding envelope of \$265.7 million.

**TABLE C-2 2022–2031 DEVELOPMENT-RELATED CAPITAL
PROGRAM & CALCULATION OF DEVELOPMENT
CHARGES**

The Services Related to a Highway development-related capital program for 2022 to 2051 includes a range of projects located throughout the County road network and is set out in Table C-2. The development-related projects are divided into seven categories and are described in Table C-3 below. The proposed road works are also illustrated in Figure 1.

The gross cost of the Roads and Related capital program is \$143.0 million and provides for the undertaking of projects throughout the County (see Table C-2). Grants and funding are applied on for project (1.4.3 – County Road 12) for a total of \$100,000 have been removed from the development charge calculation. The net cost of the program is roughly \$142.9 million.

Approximately \$19.2 million of the program cost has been identified as the benefit to existing share. Table C-3 below describes the approach for determining the benefit to existing share for each project category. The benefit to existing shares were established in collaboration with Paradigm Transportation Solutions Limited and County staff as part of the ongoing Transportation Master Plan (TMP).

Of the \$123.7 million in development-related capital costs, \$3.4 million can be funded using development charge reserve funds that have been collected from prior growth in the County.

Table C-3 – Services Related to a Highway Works – Project Categories

Category	Description	Benefit to Existing (BTE) Shares
Buildings, Land & Furnishings	Includes the expansion of existing buildings (including the Douro and Centreline Depots and Salt Shed), feasibility studies, and provisions for additional engineering space.	No BTE shares have been applied as all of the projects are entirely development-related.
Vehicles & Equipment	The capital program includes a single axle dump truck, two pick-up $\frac{3}{4}$ tonne and a provision for additional development-related vehicles.	No BTE shares have been applied as all of the projects are entirely development-related.
Studies	Development-related studies considered under this capital program include the remaining share of the Active TMP, Lakefield Network Study, County Road 10 Railway Crossing Study, TMP and a provision for additional studies to 2051.	No BTE shares have been applied to the majority of projects as they are deemed entirely development-related. A 50 per cent BTE share is applied to the County Road 10 Railway Crossing Study as the project addresses existing safety needs in addition to expanding traffic capacity.
Intersection Improvements	Addresses investments in 14 intersections across the County to improve traffic flow including traffic signals, roundabouts, and turning lanes. Three allowances for unspecified locations have also been included.	BTE of 25 per cent has been applied to all works. The projects are largely driven by development, but there are existing deficiencies that need to be improved upon that are addressed through these works.
Roadway Upgrades/ Capacity Expansion	Includes 16 roadway upgrades and/or capacity expansions throughout the County, with several projects along County Road 18 and County Road 33.	There are varying BTE allocations included. A BTE of 5 per cent is applied to projects to address existing needs between widening and alignment. A 10 per cent BTE is applied to recognize the existing resurfacing needs of roadways. Lastly, a 50 per cent BTE represents the existing deficiencies to be improved upon as part of the development-related works.

Table C-3 – Services Related to a Highway Works – Project Categories

James A. Gifford Causeway	Projects related to the James A. Gifford Causeway, including the widening of Chemong Bridge, traffic signals, roundabout/intersection improvements, an EA update and road widening.	Two projects have a BTE of 25 per cent as they benefit existing development and represent the cost to be incurred to meet existing needs. The remainder of the projects have a 10 per cent BTE applied to account for the resurfacing costs that would need to be undertaken in the absence of growth.
Other Infrastructure & Committed Projects	Allowances for cycling facilities as well as drainage and stormwater management for various locations on County Roads and consideration of committed projects.	A BTE of 75 per cent is applied to all (excluding committed projects, which have no BTE) as they largely benefit existing needs.

The remaining \$120.3 million is considered to relate to development occurring within the 2022 to 2051 planning period. This cost is allocated 74 per cent, or \$89.0 million, against new residential development and 26 per cent, or \$31.3 million, to non-residential development. The allocation of costs is based on the ratio of forecast growth in population in new units and employment. When applied to the 30-year growth in population in new units (24,152) and growth in non-residential building space (826,578 square metres), results in development charges of \$3,684.69 per capita and \$37.83 per square metre.

The following table summarizes the calculation of the Services Related to a Highway development charge:

SERVICES RELATED TO A HIGHWAY SUMMARY				
10-year Hist.	2022-2031		Calculated	
Service Level	Development-Related Capital Program		Development Charge	
per pop & emp	Total	Net DC Recoverable	\$/capita	\$/square metre
\$10,089.88	\$142,966,000	\$120,260,680	\$3,684.69	\$37.83

FIGURE 1

DEVELOPMENT-RELATED
CAPITAL PROGRAM

SERVICES RELATED TO A
HIGHWAY

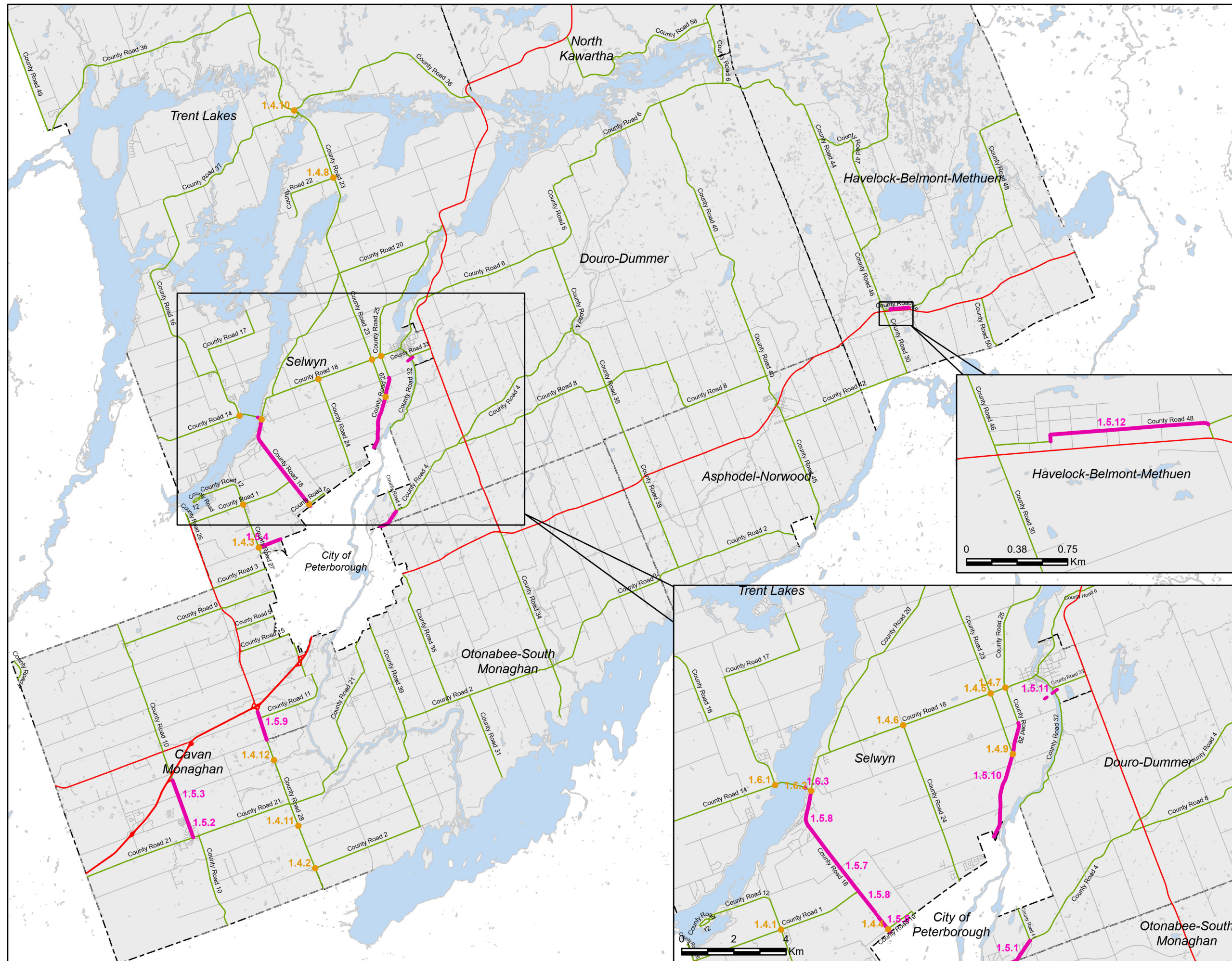
LEGEND

Road Improvement Type and Project
Number

- Intersection Improvement
- Road Widening
- - - New Connection

Road Jurisdiction

- Provincial Highway
- County Road
- Township Road



**APPENDIX C
TABLE C-1**

**COUNTY OF PETERBOROUGH
INVENTORY OF CAPITAL ASSETS
SERVICES RELATED TO A HIGHWAY**

BUILDINGS Building Name	# of Square Feet										UNIT COST
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/sq. ft.)
Buckhorn Roads Depot Office (Tran. Share)	2,960	2,960	2,960	2,960	2,960	2,960	2,960	2,960	2,960	2,960	\$ 275
Buckhorn Sand Dome	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	\$ 35
Buckhorn Depot Salt Shed 1	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	\$ 120
Buckhorn Depot Salt Shed 2	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	\$ 120
Douro Roads Depot Main	6,100	6,100	6,100	6,100	6,100	6,100	6,100	6,100	6,100	6,100	\$ 220
Douro Sand Dome North	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	\$ 35
Douro Sand Dome South	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	\$ 35
Douro Storage Garage	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	4,700	\$ 220
Douro Depot Salt Shed	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	\$ 120
Havelock Roads Depot Main	5,300	5,300	5,300	5,300	5,300	5,300	5,300	5,300	5,300	5,300	\$ 220
Havelock Sand Dome	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	\$ 35
Havelock Salt Shed	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	\$ 120
Millbrook Roads Depot Main	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	4,200	\$ 220
Millbrook Depot Sand Dome	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	\$ 35
Millbrook Storage Garage 1	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	\$ 100
Millbrook Storage Garage 2	200	200	200	200	200	200	200	200	200	200	\$ 100
Millbrook Salt Shed	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	\$ 120
Selwyn Quonset Shelter	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	\$ 25
Selwyn Roads Depot	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	\$ 200
Selwyn Depot Sand Dome	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	\$ 100
Selwyn Depot Salt Shed	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	\$ 120
County Road 6 Salt Shed	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	\$ 120
County Road 6 Sand Dome	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	\$ 35
Total (sq. ft.)	93,260	93,260	93,260	93,260	93,260	93,260	93,260	93,260	93,260	93,260	
Total (\$000)	\$9,312.0	\$9,312.0	\$9,312.0	\$9,312.0	\$9,312.0	\$9,312.0	\$9,312.0	\$9,312.0	\$9,312.0	\$9,312.0	

**APPENDIX C
TABLE C-1**

**COUNTY OF PETERBOROUGH
INVENTORY OF CAPITAL ASSETS
SERVICES RELATED TO A HIGHWAY**

LAND Building Name	# of Hectares										UNIT COST
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/hectare)
Millbrook Depot	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	\$ 300,000
Centreline Depot	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	\$ 300,000
Douro Depot	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	6.88	\$ 300,000
Douro Dummer Dome	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	\$ 300,000
Havelock Depot	2.46	2.46	2.46	2.46	2.46	2.46	2.46	2.46	2.46	2.46	\$ 300,000
Asphodel Dome	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	\$ 300,000
Buckhorn Depot	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	\$ 300,000
Gravel Pit - Blezard Line	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	\$ 300,000
Gravel Pit - County Road 38	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	\$ 300,000
Gravel Pit - 12th Line	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	3.65	\$ 300,000
Total (ha)	39	39	39	39	39	39	39	39	39	39	
Total (\$000)	\$11,579.2	\$11,579.2	\$11,579.2	\$11,579.2	\$11,579.2	\$11,579.2	\$11,579.2	\$11,579.2	\$11,579.2	\$11,579.2	

ROADS Type of Road	# of Kilometres										UNIT COST
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/km)
Class A Road - Rural - Hot Mix	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	56.0	\$ 1,385,908
Class A Road - Urban - Hot Mix	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	\$ 2,133,709
Class B Road - Surface Treated	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	\$ 760,668
Class B Road - Rural - Hot Mix	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	324.0	\$ 1,088,707
Class B Road - Urban - Hot Mix	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	\$ 1,997,309
Class C Road - Surface Treated	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	113.0	\$ 730,555
Class C Road - Rural - Hot Mix	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	110.0	\$ 1,016,353
Class C Road - Urban - Hot Mix	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	\$ 2,621,184
Total (#)	710	710	710	710	710	710	710	710	710	710	
Total (\$000)	\$744,784.0	\$744,784.0	\$744,784.0	\$744,784.0	\$744,784.0	\$744,784.0	\$744,784.0	\$744,784.0	\$744,784.0	\$744,784.0	

**APPENDIX C
TABLE C-1**

**COUNTY OF PETERBOROUGH
INVENTORY OF CAPITAL ASSETS
SERVICES RELATED TO A HIGHWAY**

BRIDGES & CULVERTS Description	# of Bridges and Culverts										UNIT COST
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/unit)
Bridges	123	126	126	126	126	127	127	127	127	127	\$ 1,180,000
Culverts	26	26	26	26	26	26	26	26	26	26	\$ 546,000
Cross Culverts	1,220	1,240	1,260	1,280	1,300	1,320	1,340	1,360	1,380	1,400	\$ 50,000
Total (#)	1,369	1,392	1,412	1,432	1,452	1,473	1,493	1,513	1,533	1,553	
Total (\$000)	\$220,336.0	\$224,876.0	\$225,876.0	\$226,876.0	\$227,876.0	\$230,056.0	\$231,056.0	\$232,056.0	\$233,056.0	\$234,056.0	

**APPENDIX C
TABLE C-1**

**COUNTY OF PETERBOROUGH
INVENTORY OF CAPITAL ASSETS
SERVICES RELATED TO A HIGHWAY**

VEHICLES Vehicle Name	# of Vehicles										UNIT COST
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	(\$/vehicle)
Grader	4	3	3	2	3	3	3	3	3	3	\$ 285,000
Shoulder Widener	0	0	1	1	1	1	1	1	1	1	\$ 285,000
Smooth Drum Roller	0	0	1	1	1	1	1	1	1	1	\$ 110,000
Loader	3	3	3	3	3	3	3	3	3	3	\$ 245,000
Backhoe	3	3	3	3	3	2	2	2	2	2	\$ 180,000
Gradall	2	2	2	1	1	1	1	1	2	2	\$ 580,000
Excavator 1	0	1	1	1	1	1	1	1	1	1	\$ 250,000
Excavator 2 - mini							1	1	1	1	\$ 50,000
Tractor	2	2	2	2	2	2	2	2	2	2	\$ 100,000
Mower	2	2	2	3	3	3	4	4	4	3	\$ 12,500
Tandem/Snow Plow	16	16	16	16	16	16	16	16	16	16	\$ 315,000
Heavy Duty Dodge 5500 4x4	0	0	0	0	0	0	0	0	1	1	\$ 95,000
Supervisor/Inspection Pick-Up Trucks	14	14	14	14	14	14	14	14	14	14	\$ 45,000
Chipper	3	3	3	3	3	3	3	3	3	3	\$ 60,000
Vacuum Excavation System	0	1	1	1	1	1	1	1	1	1	\$ 100,000
Water Tank	0	0	1	1	1	2	2	2	2	2	\$ 18,000
Sweeper	0	0	0	1	1	1	1	1	1	1	\$ 380,000
Steamer	2	2	2	2	2	2	2	2	3	3	\$ 18,500
Trailers	1	1	2	2	2	2	3	5	6	6	\$ 35,000
Fork Lift	1	1	1	1	1	1	1	1	1	1	\$ 25,000
Fleet Vehicles	15	15	17	16	22	23	25	23	22	22	\$ 45,000
Total (#)	68	69	75	74	81	82	87	87	90	89	
Total (\$000)	\$10,422.0	\$10,487.0	\$11,025.0	\$10,507.5	\$11,062.5	\$10,945.5	\$11,133.0	\$11,113.0	\$11,796.5	\$11,784.0	

**APPENDIX C
TABLE C-1**

**COUNTY OF PETERBOROUGH
INVENTORY OF CAPITAL ASSETS
SERVICES RELATED TO A HIGHWAY**

FURNITURE & EQUIPMENT	Total Value of Furniture & Equipment (\$)									
Building Name	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Douro Depot - Card Access System	\$ 10,300	\$ 10,300	\$ 10,300	\$ 10,300	\$ 10,300	\$ 10,300	\$ 10,300	\$ 10,300	\$ 10,300	\$ 10,300
Douro Depot - Radiant Heating	\$ 21,300	\$ 21,300	\$ 21,300	\$ 21,300	\$ 21,300	\$ 21,300	\$ 21,300	\$ 21,300	\$ 21,300	\$ 21,300
Douro Depot - Air Ventilation	\$ 41,000	\$ 41,000	\$ 41,000	\$ 41,000	\$ 41,000	\$ 41,000	\$ 41,000	\$ 41,000	\$ 41,000	\$ 41,000
Douro Depot - Vehicle Exhaust System	\$ 38,500	\$ 38,500	\$ 38,500	\$ 38,500	\$ 38,500	\$ 38,500	\$ 38,500	\$ 38,500	\$ 38,500	\$ 38,500
Millbrook Depot - Furnace	\$ -	\$ -	\$ 8,900	\$ 8,900	\$ 8,900	\$ 8,900	\$ 8,900	\$ 8,900	\$ 8,900	\$ 8,900
Millbrook Depot - Radiant Heating	\$ -	\$ -	\$ 38,900	\$ 38,900	\$ 38,900	\$ 38,900	\$ 38,900	\$ 38,900	\$ 38,900	\$ 38,900
Total (\$000)	\$111.1	\$111.1	\$158.9	\$158.9	\$158.9	\$158.9	\$158.9	\$158.9	\$158.9	\$158.9

**APPENDIX C
TABLE C-1**

**COUNTY OF PETERBOROUGH
CALCULATION OF SERVICE LEVELS
SERVICES RELATED TO A HIGHWAY**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Historical Population	84,560	85,156	85,759	86,369	86,985	87,301	87,676	88,107	88,596	89,145
Historical Employment	<u>11,563</u>	<u>11,927</u>	<u>12,303</u>	<u>12,690</u>	<u>13,090</u>	<u>13,095</u>	<u>13,103</u>	<u>13,113</u>	<u>13,126</u>	<u>13,139</u>
Historical Population + Employment	96,123	97,083	98,062	99,059	100,075	100,396	100,779	101,220	101,722	102,284

INVENTORY SUMMARY (\$000)

Buildings	\$9,312.0	\$9,312.0	\$9,312.0	\$9,312.0	\$9,312.0	\$9,312.0	\$9,312.0	\$9,312.0	\$9,312.0	\$9,312.0
Land	\$11,579.2	\$11,579.2	\$11,579.2	\$11,579.2	\$11,579.2	\$11,579.2	\$11,579.2	\$11,579.2	\$11,579.2	\$11,579.2
Roads	\$744,784.0	\$744,784.0	\$744,784.0	\$744,784.0	\$744,784.0	\$744,784.0	\$744,784.0	\$744,784.0	\$744,784.0	\$744,784.0
Bridges & Culverts	\$220,336.0	\$224,876.0	\$225,876.0	\$226,876.0	\$227,876.0	\$230,056.0	\$231,056.0	\$232,056.0	\$233,056.0	\$234,056.0
Vehicles	\$10,422.0	\$10,487.0	\$11,025.0	\$10,507.5	\$11,062.5	\$10,945.5	\$11,133.0	\$11,113.0	\$11,796.5	\$11,784.0
Furniture & Equipment	\$111.1	\$111.1	\$158.9	\$158.9	\$158.9	\$158.9	\$158.9	\$158.9	\$158.9	\$158.9
Total (\$000)	\$996,544.3	\$1,001,149.3	\$1,002,735.1	\$1,003,217.6	\$1,004,772.6	\$1,006,835.6	\$1,008,023.1	\$1,009,003.1	\$1,010,686.6	\$1,011,674.1

SERVICE LEVEL (\$/pop+empl)

**Average
Service
Level**

Buildings	\$96.88	\$95.92	\$94.96	\$94.00	\$93.05	\$92.75	\$92.40	\$92.00	\$91.54	\$91.04	\$93.45
Land	\$120.46	\$119.27	\$118.08	\$116.89	\$115.71	\$115.34	\$114.90	\$114.40	\$113.83	\$113.21	\$116.21
Roads	\$7,748.24	\$7,671.62	\$7,595.03	\$7,518.59	\$7,442.26	\$7,418.46	\$7,390.27	\$7,358.07	\$7,321.76	\$7,281.51	\$7,474.58
Bridges & Culverts	\$2,292.23	\$2,316.33	\$2,303.40	\$2,290.31	\$2,277.05	\$2,291.49	\$2,292.70	\$2,292.59	\$2,291.11	\$2,288.29	\$2,293.55
Vehicles	\$108.42	\$108.02	\$112.43	\$106.07	\$110.54	\$109.02	\$110.47	\$109.79	\$115.97	\$115.21	\$110.59
Furniture & Equipment	\$1.16	\$1.14	\$1.62	\$1.60	\$1.59	\$1.58	\$1.58	\$1.57	\$1.56	\$1.55	\$1.50
Total (\$/pop+empl)	\$10,367.39	\$10,312.30	\$10,225.52	\$10,127.48	\$10,040.20	\$10,028.64	\$10,002.31	\$9,968.42	\$9,935.77	\$9,890.80	\$10,089.88

**COUNTY OF PETERBOROUGH
CALCULATION OF MAXIMUM ALLOWABLE
SERVICES RELATED TO A HIGHWAY**

30-Year Funding Envelope Calculation	
10-Year Average Service Level 2012-2021	\$10,089.9
Net Population & Employment Growth 2022-2051	26,335
Net Maximum Allowable Funding Envelope	\$265,720,890

**APPENDIX C
TABLE C-2**

**COUNTY OF PETERBOROUGH
DEVELOPMENT-RELATED CAPITAL PROGRAM
SERVICES RELATED TO A HIGHWAY**

Project Description	Gross Project Cost	Grants/ Subsidies/ Other Recoveries	Net Municipal Cost	Ineligible Costs Replacement & BTE Shares	Ineligible Costs Replacement & BTE Shares	Total DC Eligible Costs	DC Eligible Costs		
							Prior Growth	2022-2051	Other Dev. Related
1.0 SERVICES RELATED TO A HIGHWAY									
1.1 Buildings, Land & Furnishings									
1.1.1 Douro Depot Expansion (3,000 sq.ft)	\$ 660,000	\$ -	\$ 660,000	0%	\$ -	\$ 660,000	\$ -	\$ 660,000	\$ -
1.1.2 Centreline Depot - Feasibility Study	\$ 80,000	\$ -	\$ 80,000	0%	\$ -	\$ 80,000	\$ 80,000	\$ -	\$ -
1.1.3 Centreline Depot - Expansion (3,000 sq.ft)	\$ 825,000	\$ -	\$ 825,000	0%	\$ -	\$ 825,000	\$ -	\$ 825,000	\$ -
1.1.4 Salt Shed - Expand Capacity	\$ 156,000	\$ -	\$ 156,000	0%	\$ -	\$ 156,000	\$ 156,000	\$ -	\$ -
1.1.5 Provision for Additional Engineering Space	\$ 1,000,000	\$ -	\$ 1,000,000	0%	\$ -	\$ 1,000,000	\$ -	\$ 1,000,000	\$ -
Subtotal Buildings, Land & Furnishings	\$ 2,721,000	\$ -	\$ 2,721,000		\$ -	\$ 2,721,000	\$ 236,000	\$ 2,485,000	\$ -
1.2 Vehicles & Equipment									
1.2.1 Single Axle Dump Truck	\$ 150,000	\$ -	\$ 150,000	0%	\$ -	\$ 150,000	\$ 150,000	\$ -	\$ -
1.2.2 Pick-up 3/4 tonne	\$ 48,000	\$ -	\$ 48,000	0%	\$ -	\$ 48,000	\$ 48,000	\$ -	\$ -
1.2.3 Pick-up 3/4 tonne	\$ 48,000	\$ -	\$ 48,000	0%	\$ -	\$ 48,000	\$ 48,000	\$ -	\$ -
1.2.4 Provision for New Vehicles	\$ 750,000	\$ -	\$ 750,000	0%	\$ -	\$ 750,000	\$ -	\$ 750,000	\$ -
Subtotal Vehicles & Equipment	\$ 996,000	\$ -	\$ 996,000		\$ -	\$ 996,000	\$ 246,000	\$ 750,000	\$ -
1.3 Studies									
1.3.1 Active Transportation Master Plan (remaining share)	\$ 55,000	\$ -	\$ 55,000	0%	\$ -	\$ 55,000	\$ 55,000	\$ -	\$ -
1.3.2 Lakefield Network Study	\$ 100,000	\$ -	\$ 100,000	0%	\$ -	\$ 100,000	\$ -	\$ 100,000	\$ -
1.3.3 County Road 10 Railway Crossing Study	\$ 75,000	\$ -	\$ 75,000	50%	\$ 37,500	\$ 37,500	\$ -	\$ 37,500	\$ -
1.3.4 Transportation Master Plan (including supporting studies)	\$ 450,000	\$ -	\$ 450,000	0%	\$ -	\$ 450,000	\$ -	\$ 450,000	\$ -
1.3.5 Provision for Additional Studies (TMP, ATMP, Other Studies to 2051)	\$ 3,500,000	\$ -	\$ 3,500,000	0%	\$ -	\$ 3,500,000	\$ -	\$ 3,500,000	\$ -
Subtotal Studies	\$ 4,180,000	\$ -	\$ 4,180,000		\$ 37,500	\$ 4,142,500	\$ 55,000	\$ 4,087,500	\$ -
1.4 Intersection Improvements									
1.4.1 CR 01 (Lindsay Road) and CR 12 (Fifes Bay Road)	\$ 425,000	\$ -	\$ 425,000	25%	\$ 106,250	\$ 318,750	\$ -	\$ 318,750	\$ -
1.4.2 CR 02 and CR 28	\$ 275,000	\$ -	\$ 275,000	25%	\$ 68,750	\$ 206,250	\$ -	\$ 206,250	\$ -
1.4.3 CR 12 (Lily Lake Road/Fifes Bay Road) and CR 27 (Ackison Road)	\$ 625,000	\$ 100,000	\$ 525,000	25%	\$ 131,250	\$ 393,750	\$ -	\$ 393,750	\$ -
1.4.4 CR 18 and CR 19 (Line Road 3)/Line Road 3	\$ 100,000	\$ -	\$ 100,000	25%	\$ 25,000	\$ 75,000	\$ -	\$ 75,000	\$ -
1.4.5 CR 18 (8th Line) and CR 23 (Buckhorn Road)	\$ 450,000	\$ -	\$ 450,000	25%	\$ 112,500	\$ 337,500	\$ -	\$ 337,500	\$ -
1.4.6 CR 18 (8th Line) and CR 24 (Centre Line)	\$ 350,000	\$ -	\$ 350,000	25%	\$ 87,500	\$ 262,500	\$ -	\$ 262,500	\$ -
1.4.7 CR 18 (8th Line) and CR 25 (Youngs Point Road)	\$ 250,000	\$ -	\$ 250,000	25%	\$ 62,500	\$ 187,500	\$ -	\$ 187,500	\$ -
1.4.8 CR 22 (Curve Lake Road) and CR 23 (Buckhorn Road)	\$ 2,750,000	\$ -	\$ 2,750,000	25%	\$ 687,500	\$ 2,062,500	\$ -	\$ 2,062,500	\$ -
1.4.9 CR 23 (Buckhorn Road) and CR 29 (Lakefield Road)	\$ 350,000	\$ -	\$ 350,000	25%	\$ 87,500	\$ 262,500	\$ -	\$ 262,500	\$ -
1.4.10 CR 23 (Buckhorn Road) and CR 36	\$ 180,000	\$ -	\$ 180,000	25%	\$ 45,000	\$ 135,000	\$ -	\$ 135,000	\$ -
1.4.11 CR 28 and Third Line/Zion Line	\$ 175,000	\$ -	\$ 175,000	25%	\$ 43,750	\$ 131,250	\$ -	\$ 131,250	\$ -
1.4.12 CR 28 and Larmer Line	\$ 75,000	\$ -	\$ 75,000	25%	\$ 18,750	\$ 56,250	\$ -	\$ 56,250	\$ -
1.4.13 Allowance for Unspecified Locations	\$ 250,000	\$ -	\$ 250,000	25%	\$ 62,500	\$ 187,500	\$ -	\$ 187,500	\$ -
1.4.14 Allowance for Unspecified Locations	\$ 250,000	\$ -	\$ 250,000	25%	\$ 62,500	\$ 187,500	\$ -	\$ 187,500	\$ -
1.4.15 Allowance for Unspecified Locations	\$ 250,000	\$ -	\$ 250,000	25%	\$ 62,500	\$ 187,500	\$ -	\$ 187,500	\$ -
Subtotal Intersection Improvements	\$ 6,755,000	\$ 100,000	\$ 6,655,000		\$ 1,663,750	\$ 4,991,250	\$ -	\$ 4,991,250	\$ -

**APPENDIX C
TABLE C-2**

**COUNTY OF PETERBOROUGH
DEVELOPMENT-RELATED CAPITAL PROGRAM
SERVICES RELATED TO A HIGHWAY**

Project Description	Gross Project Cost	Grants/ Subsidies/Other Recoveries	Net Municipal Cost	Ineligible Costs Replacement & BTE Shares	Ineligible Costs Replacement & BTE Shares	Total DC Eligible Costs	DC Eligible Costs		
							Prior Growth	2022-2051	Other Dev. Related
1.0 SERVICES RELATED TO A HIGHWAY									
1.5 Roadway Upgrades/Capacity Expansion									
1.5.1 CR 04 (Warsaw Road) - Television Road to CR 41 (University Road)	\$ 7,680,000	\$ -	\$ 7,680,000	5%	\$ 384,000	\$ 7,296,000	\$ 80,000	\$ 7,216,000	\$ -
1.5.2 CR 10 - County Rd 21 (King Street) to Fallis Line - (Millbrook) - NEW	\$ 9,800,000	\$ -	\$ 9,800,000	10%	\$ 980,000	\$ 8,820,000	\$ 80,000	\$ 8,740,000	\$ -
1.5.3 CR 10 - Fallis Line to Highway 115	\$ 11,207,000	\$ -	\$ 11,207,000	10%	\$ 1,120,700	\$ 10,086,300	\$ 80,000	\$ 10,006,300	\$ -
1.5.4 CR 12 (Lily Lake Road) - CR 27 (Ackison Road) to City of Peterborough Limit	\$ 6,560,000	\$ -	\$ 6,560,000	10%	\$ 656,000	\$ 5,904,000	\$ 80,000	\$ 5,824,000	\$ -
1.5.5 CR 18 (Chemong Road) - City of Peterborough Limit to 0.6 km N. of CR 19 (Line Road 3)	\$ 2,197,000	\$ -	\$ 2,197,000	10%	\$ 219,700	\$ 1,977,300	\$ 80,000	\$ 1,897,300	\$ -
1.5.6 CR 18 (Chemong Road) - 1 km N. of CR 19 (Line Road 3) to CR 1 (Lindsay Road)	\$ 1,896,000	\$ -	\$ 1,896,000	10%	\$ 189,600	\$ 1,706,400	\$ 80,000	\$ 1,626,400	\$ -
1.5.7 CR 18 (Chemong Road) - CR 1 (Lindsay Road) to Bridgenorth	\$ 6,600,000	\$ -	\$ 6,600,000	10%	\$ 660,000	\$ 5,940,000	\$ 80,000	\$ 5,860,000	\$ -
1.5.8 CR 18 (Ward Street) - South Limit of Bridgenorth to CR 14 (Bridge Road)	\$ 17,460,000	\$ -	\$ 17,460,000	25%	\$ 4,365,000	\$ 13,095,000	\$ 80,000	\$ 13,015,000	\$ -
1.5.9 CR 28 - From Highway 7- 115 to Fraserville - NEW	\$ 9,300,000	\$ -	\$ 9,300,000	10%	\$ 930,000	\$ 8,370,000	\$ 80,000	\$ 8,290,000	\$ -
1.5.10 CR 29 (Lakefield Road) - City of Peterborough Limit to 7th Line	\$ 14,760,000	\$ -	\$ 14,760,000	10%	\$ 1,476,000	\$ 13,284,000	\$ 80,000	\$ 13,204,000	\$ -
1.5.11 CR 29 (Lakefield Road/Water Street) - Lakefield Second Crossing	\$ 25,800,000	\$ -	\$ 25,800,000	0%	\$ -	\$ 25,800,000	\$ 80,000	\$ 25,720,000	\$ -
1.5.12 CR 48 (George Street) - CR 48 (Ontario Street) to Mill Lane (County's share)	\$ 5,864,000	\$ -	\$ 5,864,000	50%	\$ 2,932,000	\$ 2,932,000	\$ 80,000	\$ 2,852,000	\$ -
Subtotal Roadway Upgrades/Capacity Expansion	\$ 119,124,000	\$ -	\$ 119,124,000		\$ 13,913,000	\$ 105,211,000	\$ 960,000	\$ 104,251,000	\$ -
1.6 James A. Gifford Causeway									
1.6.1 CR 14 (Yankee Line/Bridge Road) and CR 16 (Robinson Road)	\$ 480,000	\$ -	\$ 480,000	25%	\$ 120,000	\$ 360,000	\$ 31,570	\$ 328,430	\$ -
1.6.2 CR 14 (Bridge Road) and CR 18 (Ward Street)	\$ 2,160,000	\$ -	\$ 2,160,000	25%	\$ 540,000	\$ 1,620,000		\$ 1,620,000	\$ -
1.6.3 CR 14 (Yankee Line/Bridge Road) - CR 16 (Robinson Road) to CR 18 (Ward Street) (Remaining work 2023)	\$ 900,000	\$ -	\$ 900,000	10%	\$ 90,000	\$ 810,000	\$ -	\$ 810,000	\$ -
Subtotal James A. Gifford Causeway	\$ 3,540,000	\$ -	\$ 3,540,000		\$ 750,000	\$ 2,790,000	\$ 31,570	\$ 2,758,430	\$ -
1.7 Other Infrastructure & Committed Projects									
1.7.1 Allowance for Cycling Facilities (Paved Shoulders and Multi-Use Trails) - Various Locations on County Roads	\$ 1,000,000	\$ -	\$ 1,000,000	75%	\$ 750,000	\$ 250,000	\$ -	\$ 250,000	\$ -
1.7.2 Allowance for Cycling Facilities (Paved Shoulders and Multi-Use Trails) - Various Locations on County Roads	\$ 1,000,000	\$ -	\$ 1,000,000	75%	\$ 750,000	\$ 250,000	\$ -	\$ 250,000	\$ -
1.7.3 Allowance for Cycling Facilities (Paved Shoulders and Multi-Use Trails) - Various Locations on County Roads	\$ 1,000,000	\$ -	\$ 1,000,000	75%	\$ 750,000	\$ 250,000	\$ -	\$ 250,000	\$ -
1.7.4 Allowance for Drainage and Stormwater Management - Various Locations on County Roads	\$ 250,000	\$ -	\$ 250,000	75%	\$ 187,500	\$ 62,500	\$ -	\$ 62,500	\$ -
1.7.5 Allowance for Drainage and Stormwater Management - Various Locations on County Roads	\$ 250,000	\$ -	\$ 250,000	75%	\$ 187,500	\$ 62,500	\$ -	\$ 62,500	\$ -
1.7.6 Allowance for Drainage and Stormwater Management - Various Locations on County Roads	\$ 250,000	\$ -	\$ 250,000	75%	\$ 187,500	\$ 62,500	\$ -	\$ 62,500	\$ -
1.7.7 County Committed Projects	\$ 1,900,000	\$ -	\$ 1,900,000	0%	\$ -	\$ 1,900,000	\$ 1,900,000	\$ -	\$ -
Subtotal Other Infrastructure & Committed Projects	\$ 5,650,000	\$ -	\$ 5,650,000		\$ 2,812,500	\$ 2,837,500	\$ 1,900,000	\$ 937,500	\$ -
TOTAL SERVICES RELATED TO A HIGHWAY	\$ 142,966,000	\$ 100,000	\$ 142,866,000		\$ 19,176,750	\$ 123,689,250	\$ 3,428,570	\$ 120,260,680	\$ -

Residential Development Charge Calculation

Residential Share of 2022 - 2051 DC Eligible Costs	74%	\$88,992,904
30-Year Population Growth in New Units		24,152
Development Charge Per Capita		\$3,684.69

Non-Residential Development Charge Calculation

Non-Residential Share of 2022 - 2051 DC Eligible Costs	26%	\$31,267,777
30-Year Growth in Square Metres		826,578
Development Charge Per Square Metre		\$37.83

2022 - 2051 Net Funding Envelope	\$265,720,890
Uncommitted Reserve Fund Balance Balance as at December 31, 2021	\$3,428,570

APPENDIX D

RESERVE FUNDS

APPENDIX D: RESERVE FUNDS

The *Development Charges Act* requires that a reserve fund be established for each service for which development charges are collected. Table D-1 presents the reserve fund balances, as at December 31, 2021, that are available to help fund the development-related net capital costs identified in this study. All of the available reserve funds are accounted for in this study.

As shown in Table D-1, the December 31, 2021 total reserve fund balance was in a positive position of \$5.5 million. Positive reserve fund balances are assigned to projects in the initial years of the capital program for each service. This has the effect of reducing and deferring capital costs brought forward to the development charge calculation. Negative balances are recovered as a project in the capital program, where applicable.

TABLE D-1

**COUNTY OF PETERBOROUGH
DEVELOPMENT CHARGE RESERVE FUND BALANCE BY ACCOUNT
YEAR ENDING DECEMBER 31, 2021**

Service	Reserve Fund Balance as of December 31, 2021
Emergency Medical Services	\$467,212
Emergency Measures	\$48,448
Long-Term Care	\$980,371
Social Services	\$341,848
Health Unit	\$232,121
Waste Diversion	\$1,268
Transit	\$10,955
Development-Related Studies	\$30,607
Services Related To A Highway	\$3,428,570
Total Development Charge Reserves	\$5,541,398

APPENDIX E

COST OF GROWTH ANALYSIS

APPENDIX E: COST OF GROWTH ANALYSIS

A. ASSET MANAGEMENT PLAN

The *Development Charges Act* now requires that municipalities complete an Asset Management Plan before passing a development charges by-law. A key function of the Asset Management Plan is to demonstrate that all assets proposed to be funded under the development charges by-law are financially sustainable over their full life-cycle.

i. Asset Types

A summary of the future County-owned assets and estimated useful life assumptions for eligible DC services considered as part of the study are outlined in Table E-1. Although all capital assets considered in the study have been identified, not all assets necessitate future replacement or ongoing maintenance activities. Some projects do not relate to the emplacement of a tangible capital asset – some examples include the acquisition of land, recovery of completed projects or the undertaking of development-related studies. These projects/costs do not necessarily require future replacement or ongoing maintenance. Such projects are identified as “not infrastructure” in the table.

It should be noted that the capital cost estimates prepared for each of the projects identified in this section include grouped costs of various individual elements, which, as a stand-alone item, may have its own useful life (ex. New buildings include: HVAC, structural elements, roof, etc.). Accordingly, the average useful life assumptions noted below are applicable to all project components.

TABLE E-1	
SUMMARY OF COUNTY ASSETS CONSIDERED	
Emergency Medical Services	
▪ Buildings, Land & Furnishings	▪ 50 years
▪ Vehicles & Equipment	▪ 15 years
▪ Development-Related Studies	▪ Not infrastructure
Long-Term Care	
▪ Buildings, Land & Furnishings	▪ 50 years
Health Unit	
▪ Buildings, Land & Furnishings	▪ 50 years
Waste Diversion	
▪ Buildings, Land & Furnishings	▪ 50 years
▪ Curb-Side Organic Expansion	▪ 20 years

TABLE E-1 SUMMARY OF COUNTY ASSETS CONSIDERED	
Development-Related Studies	
▪ Development-Related Studies	▪ Not infrastructure
Services Related to a Highway: Roads & Related	
▪ Buildings, Land & Furnishings	▪ 50 years
▪ Vehicles & Equipment	▪ 20 years
▪ Studies	▪ Not infrastructure
▪ Intersection Improvements	▪ 50 years
▪ Roadway Upgrades/Capacity Expansion	▪ 50 years
▪ James A. Gifford Causeway	▪ 50 years
▪ Other Infrastructure	▪ 50 years
▪ Committed Projects	▪ Not infrastructure

No annual provisions have been identified for Development-Related Studies as the plan updates and studies included in the development charge category are not infrastructure and therefore have no long-term financial requirements.

ii. Annual Provision

When assets require rehabilitation or are due for replacement, the source of funds is limited to reserves or contributions from operating. Capital expenditures to carry out the rehabilitation and replacement of aging infrastructure are not growth-related and are therefore not eligible for funding through development charge revenues or other developer contributions.

Based on the useful life assumptions and the capital cost of acquiring and/or emplacing each asset, a provision for infrastructure replacement has been calculated for both the general and engineered services. Provisions for infrastructure replacement are initially calculated for each asset based on their useful life and the anticipated cost of replacement. The aggregate of all individual provisions form the required annual capital provision. In calculating the annual provisions, a number of assumptions are made to account for inflation (2.0 per cent) and interest (3.5 per cent).

Consistent with the requirements of the DCA, assets that are proposed to be funded under the development charges by-law have been included in the analysis. As a result, the total calculated annual provision for development charge related infrastructure has been netted down to consider the replacement of existing infrastructure or benefit-to-existing development. However, for reference, the annual replacement provisions associated with

the non-development charge funded costs, including costs related to the benefit-to-existing and post-period benefit have also been calculated.

Tables E-2 and E-3 provide the calculated annual asset management contribution for both the gross capital expenditures and the share related to the 2022 to 2031 and 2022 to 2051 DC recoverable portions, respectively. The years 2032 and 2052 have been included to calculate the annual contribution for the planning periods 2022 to 2031 and 2022 to 2051 as the expenditures in 2031 and 2051 will not trigger asset management contributions until 2032 and 2052, respectively. As shown in Table E-2, by 2032, the County will need to fund an additional \$49,100 in order to properly fund the full life cycle costs of the new assets related to all services supported under the development charges by-law. Table E-3 shows that by 2042 the County will need to fund an additional \$1.2 million in order to properly fund the full life cycle costs of the new assets for Services Related to a Highway under the by-law.

TABLE E-2

**COUNTY OF PETERBOROUGH
ANNUAL ASSET MANAGEMENT PROVISION BY 2032**

Service	2022-2031 Capital Program		Calculated AMP Annual Provision by 2032	
	DC Related	Non-DC Related*	DC Related	Non-DC Related
Emergency Medical Services	\$ 700,100	\$ 991,900	\$ 23,600	\$ 33,500
Long-Term Care	\$ 2,408,500	\$ 42,591,500	\$ 20,800	\$ 368,100
Health Unit	\$ 485,000	\$ 3,490,000	\$ 4,000	\$ 29,000
Waste Diversion	\$ 82,400	\$ 452,600	\$ 700	\$ 14,600
Development-Related Studies	\$ 1,315,000	\$ 65,000	\$ -	\$ -
Total	\$ 4,991,000	\$ 47,591,000	\$ 49,100	\$ 445,200

*Includes costs that will be recovered in future development charge studies (i.e. post-period benefit)

TABLE E-3

**COUNTY OF PETERBOROUGH
ANNUAL ASSET MANAGEMENT PROVISION BY 2052**

Service	2022-2051 Capital Program		Calculated AMP Annual Provision by 2052	
	DC Related	Non-DC Related*	DC Related	Non-DC Related
Services Related To A Highway	\$ 123,689,300	\$ 19,276,800	\$ 1,197,600	\$ 175,700
Total	\$ 123,689,300	\$ 19,276,800	\$ 1,197,600	\$ 175,700

*Includes costs that will be recovered in future development charge studies (i.e. post-period benefit)

iii. Future Revenue Growth

The calculated annual funding provision should be considered within the context of the County's projected growth. Over the next ten years, the County is projected to increase by approximately 7,500 people. In addition, the County will also add about 3,100 new employees that will result in approximately 301,300 square metres of additional non-residential building space. By 2051, the County is project to increase by approximately 17,800 people while on the non-residential side adding 8,600 employees resulting in 826,600 square metres of additional non-residential building space.

This growth will have the effect of increasing the overall assessment base. This leads to additional user fee and charge revenues to offset the capital asset provisions required to replace the infrastructure proposed to be funded under the development charges by-law. The collection of these funds is intended to be allocated to the County's reserves for future replacement of these assets.

B. LONG-TERM CAPITAL AND OPERATING IMPACTS

As shown in Table E-4, by 2031, the County's net operating costs are estimated to increase by \$2.7 million for property tax supported services. Increases in net operating costs will be experienced as additional facilities undergo expansions of space, such as Health Unit and Long-Term Care, new buildings (including Emergency Medical Services and Waste Diversion) and various vehicles and equipment.

TABLE E-4

COUNTY OF PETERBOROUGH
SUMMARY OF LONG TERM CAPITAL AND
OPERATING COST IMPACTS
(in thousands of constant dollars)

	2031
Net Operating Impacts	
Emergency Medical Services	\$200.7
Long-Term Care	\$1,500.0
Health Unit	\$97.0
Waste Diversion	\$107.0
Development-Related Studies	\$0.0
Services Related To A Highway	\$755.0
NET OPERATING IMPACTS	\$2,659.7

	Total to 2031	Total to 2051 (3)
Long-term Capital Impact		
Total Net Cost	\$18,100.1	\$142,866.0
Net Cost from Development Charges	\$3,279.4	\$120,260.7
Prior Growth Share from DC Reserve Balances (1)	\$1,711.6	\$3,428.6
Portion for Other Development-Related (2)	\$1,384.4	\$0.0
Funding from Non-DC Sources		
Replacement	\$11,724.7	\$19,176.8
FUNDING FROM NON-DC SOURCES	\$11,724.7	\$19,176.8

Notes:

- (1) Existing development charge reserve fund balances collected from growth prior to 2022 are applied to fund initial projects in development-related capital forecast.
- (2) Other development-related net capital costs may be eligible for development charge funding in future DC by-laws.
- (3) The total to 2051 only accounts for Services Related to a Highway costs.

Table E-5 summarizes the components of the development-related capital forecast that will require funding from non-DC sources (e.g. property tax) for the planning period 2022 to 2031 and to 2051. In total, \$11.7 million will need to be financed from non-DC sources over the planning period to 2031 and is related to facilities and infrastructure that will benefit the existing community. In addition, \$1.4 million in interim DC financing related to other development related shares of projects may be required. However, because DC By-laws must be revisited at least every five years, it is difficult to determine the quantum of interim financing that may be necessary.

TABLE E-5

**COUNTY OF PETERBOROUGH
SUMMARY OF DEVELOPMENT CHARGE ELIGIBLE AND INELIGIBLE COSTS**

Service	Development-Related Capital Program (2022-2031)				
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Prior Growth (\$000)	Other Dev. Related (\$000)	Total DC Eligible Costs for Recovery (\$000)
1.0 Emergency Medical Services	\$700.1	\$0.0	\$467.2	\$0.0	\$232.9
2.0 Long-Term Care	\$15,000.0	\$11,659.7	\$980.4	\$931.8	\$1,428.1
2.0 Health Unit	\$485.0	\$0.0	\$232.1	\$0.0	\$252.9
3.0 Waste Diversion	\$535.0	\$0.0	\$1.3	\$452.6	\$81.1
3.0 Development-Related Studies	\$1,380.0	\$65.0	\$30.6	\$0.0	\$1,284.4
Total	\$18,100.1	\$11,724.7	\$1,711.6	\$1,384.4	\$3,279.4

Table E-6 summarizes the components of the development-related capital forecast that will require funding from non-DC sources (e.g. property tax) for the planning period 2022 to 2051. In total, \$19.2 million will need to be financed from non-DC sources over the planning period and is related to facilities and infrastructure that will benefit the existing community.

TABLE E-6

**COUNTY OF PETERBOROUGH
SUMMARY OF DEVELOPMENT CHARGE ELIGIBLE AND INELIGIBLE COSTS**

Service	Development-Related Capital Program (2022-2051)				
	Net Municipal Cost (\$000)	Replacement & Benefit to Existing (\$000)	Prior Growth (\$000)	Other Dev. Related (\$000)	Total DC Eligible Costs for Recovery (\$000)
1.0 Services Related To A Highway	\$142,866.0	\$19,176.8	\$3,428.6	\$0.0	\$120,260.7
Total	\$142,866.0	\$19,176.8	\$3,428.6	\$0.0	\$120,260.7

Council is made aware of these factors so that they understand the operating and capital costs that will not be covered by DCs as it adopts the development-related capital forecast set out in the study.

C. THE PROGRAM IS DEEMED FINANCIALLY SUSTAINABLE

In summary, the Asset Management Plan and long-term capital and operating analysis included in this appendix demonstrates that the County can afford to invest and operate the identified general and engineered services infrastructure over the ten-year and long-term planning periods.

Importantly, the County's annual budget review allows staff to continue to monitor and implement mitigating measures should the program become less sustainable.